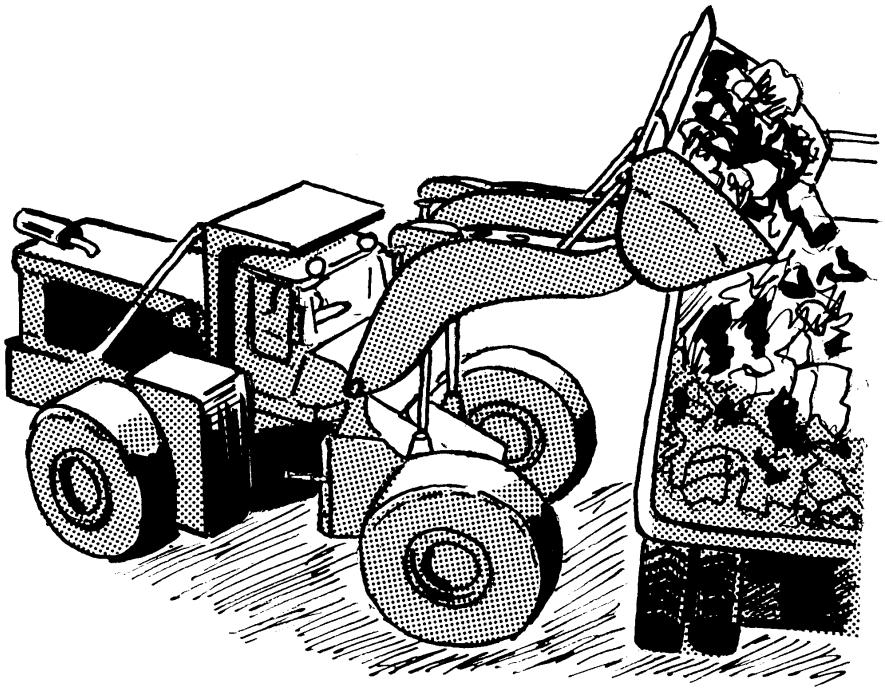
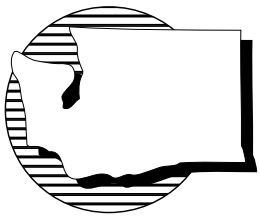
T2

1996 Audio-Visual Catalog





The Northwest Technology Transfer Center

Washington State Department of Transportation
TransAid Service Center

U.S. Department of Transportation
Federal Highway Administration

Northwest T^2 Center

Audio-Visual Catalog

March 1996

Washington State Department of Transportation
TransAid Service Center

This catalog contains a listing of various ½-inch VHS audiovisual tapes available through the Northwest Technology Transfer Center. The Center, sponsored by the Federal Highway Administration and WSDOT's TransAid Service Center, is part of the Local Technical Assistance Program (LTAP) and serves the state of Washington.

The Center's "road shows" and these audiovisual tapes are available to you at no charge. Use this catalog to select training films which our trainer can deliver to your agency. You can also borrow the tapes by contacting the technical assistant at (360) 705-7386.

Call or write:

Northwest Technology Transfer Center
WSDOT — TransAid Service Center
Transportation Building
P.O. Box 47390
Olympia, WA 98504-7390

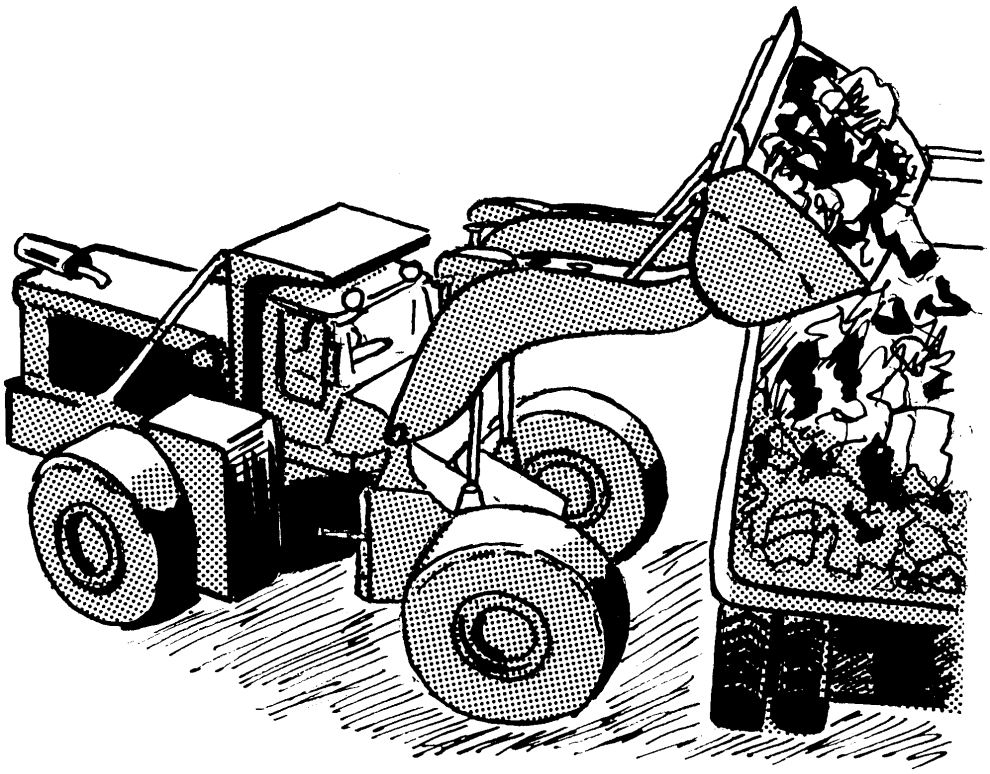
Director: George D. Crommes, (360) 705-7390
Technical Assistant: Laurel Gray, (360) 705-7386
Training Coordinator: Stan Sanders, (360) 705-7477 or (800) 973-4496
T2 Trainer: (360) 705-7385
Fax: (360) 705-6858

2:P:AVC1

The Use of This Catalog

The audiovisuals listed in this catalog are for the Center's T2 "road shows." Loan copies are also available should an agency wish to borrow tapes for in-house training.

The purpose of the T2 "road shows" is to provide face-to-face technology transfer to the users at their place of work. A van, fully equipped with audio visual equipment, video tapes, and reference materials, is available each spring and fall. The driver/trainer conducts training sessions either at centralized or remote sites. This catalog provides the start for defining the contents of these training sessions. Host coordinators of the local agencies work with the road show trainer in making arrangements for the training sessions. The service is free to local public agencies.



Example

Following is an example of how a local agency can use this catalog.

Jim Smith, Public Works Director of a rural county, sees the need for additional staff training. In addition to the county's extensive routine and preventive maintenance activities, upcoming projects include erosion control at a major stream, steel bridge inspection, and the construction of an asphalt overlay of a major county roadway. Jim is also concerned that his equipment operators benefit from some additional safety awareness.

Jim reviews this catalog which has been sent to his agency previously. He looks through the Tape Topics to define the categories of tapes that are of interest to his upcoming work.

In the Banks and Slopes category, he notes that No. 27, Keyed Riprap, has to do with stream protection. Jim selects it. Continuing on by using the tape titles, the description of the tapes, and the ratings, Jim selects additional tapes from each category. His tentative list becomes:

Earthwork and Drainage — No. 27 – Keyed Riprap, 12 minutes

Bridge Inspection and/or Maintenance — No. 48A – Introduction to Bridge Inspection, 24 minutes

Bridge Inspection and/or Maintenance — No. 48B – Steel Truss Bridge Inspection, 50 minutes

Equipment — No. 50 – Motor Grader Operation, 54 minutes

Equipment — No. 54 – Loader Operation, 35 minutes

Asphalt — No. 45 – Specialty Maintenance Products, 45 minutes

Potholes — No. 11 – Potholes, Causes, Cures, Preventions, 17 minutes

Seal Coats — No. 12 – Bituminous Seal Coats, 12 minutes

Gravel and Dirt Roads — No. 61 – Upgrading Gravel Roads, 21 minutes

Asphalt and Concrete Pavement — No. 1 – Bituminous Concrete Paving, 45 minutes

Next, Jim adds up the time of the tapes: 315 minutes

= 5.25 hours

As discussion occurs after each tape and to also allow for breaks, the value given is then divided by 0.75 to account for the total training session length.

$$\frac{5.25 \text{ hours}}{0.75} = 7.0 \text{ hours}$$

Jim discusses his selection with his staff. Staff agrees with the selection. Jim or his representative contacts the NWT2 Center's Trainer and arranges for showing of the aforementioned tapes during a 7.0-hour training session at the county's maintenance shed.

Tape Topics

Note: An index at the end of this book provides key words for searching tapes.

Technology and Innovations

Innovations

142 Paving the Way for Tomorrow's Highways (SHRP)

144 The Idea Store — Editions 1 and 2 (Pennsylvania T2)

187 Idea Store — Edition 3 (Pennsylvania T2)

194 Idea Store — Edition 4 (Pennsylvania T2)

213 Idea Store — Edition 5 (Pennsylvania T2)

215 Technical Advancements for Maintenance Workers (SHRP)

229 Idea Store — Edition 6 (Pennsylvania T2)

238 Idea Store — Edition 7 (Pennsylvania T2)

244 New Work Zone Safety Devices (SHRP)

245 Subsurface Utility Engineering: A Technology for the 90's

274 Soil Stabilization (FHWA)

275 Cold In-Place Recycling (ARRA)

281 Idea Store — Edition 9 (Pennsylvania DOT)

284 Traffic Barriers and Control Treatment for Restricted Work Zones (NCHRP)

289 Idea Store No. 8 (Pennsylvania DOT)

302 Finding Better Ways — New Research into Cost-Effective Pavement Repairs (SHRP)

304 Clemson Beaver Pond Leveller: One Solution (South Carolina T2)

308 Road Maintenance for All Four Seasons (Finnish NRA)

309 Retrofitted Load Transfer Devices (Keystone Engineering)

318 Effective Snow Fences (SHRP)

320 Quick Change Moveable Barrier (Barriers Systems, Inc.)

Technology Transfer (General)

101 Better Inductive Loop Detectors (FHWA and NYDOT)

148 Ramp Metering: Signals for Success (FHWA)

159 The Rural Transportation Assistance Program (NHI)

306 Creating Meadows Through Road Maintenance and Construction (USFS)

Materials (General)

3 Intro to Asphalt Materials (AI and TIE)

4 Asphalt Pavement Applications (AI and TIE)

45 Specialty Maintenance Products (AI and TIE)

260 Hydrated Lime — Key to Improved Asphalt Pavements (National Lime Association)

319 Road Oyl (SSPC, Inc.)

322 Ultra-Thin Whitetopping (ACPA/NRMCA)

323 Dura Patcher (Duraco Industries, Inc.)

General Interest

Planning, Administration, Management, and Supervision

Management (General)

23 Pavement Management Systems (AI and MSU)

82 Guidelines for Spring Highway Use Restrictions (NWT2)

129 Bridge Maintenance Systems (1987) (Pennsylvania DOT)

140 Emergency Relief (FHWA)

141 Road Jurisdiction Study (LTC)

142 Paving the Way for Tomorrow's Highways (SHRP)

176 The Best Defense … Is a Good Road (NYT2)

178 Pedestrian Safety (What Can You Do) (FHWA)

186 Pavement Management Systems (USCOE and FHWA)

192 Pavement Management (FHWA)

197 Everything Rides on Roads (Allied Video)

227 DOT Growth Management (WATT Group)

228 Paths of Thunder (FECRCo)

253 Sexual Harassment in the Work Place (Don Brown Productions)

262 The Deposition (Pennsylvania DOT)

283 Managing and Inspecting Unsurfaced Roads (USACRREL)

317 Pavement Surface Condition Rating Video (WSDOT, NWT2, et. al.)

327 Stress Management — Supervisors and Employees (Training Network, Inc.)

Environmental

30 Highway Runoff Water Quality (WSDOT)

111 Working With Pesticides, Volume 1 (The Idea Bank)

112 The Use of Pesticides, Volume 2 (The Idea Bank)

127 Erosion and Sedimentation Control for Highway Construction (Pennsylvania DOT)

165 Weed Control (Utah DOT)

175 Transportation and Wetland Protection (WSDOT)

216 Vegetation Management (WSDOT)

230 Choices: Transportation for Washington's Environment (WSDOT)

247 Fish Passage Through Culverts (FHWA and USFS)

329 Subsurface Utility Engineering — A Proven Solution (FHWA)

Planning

59 Subdivisions: A Local Dilema (MSU)

104 Truck Impacts on Pavements (FHWA)

141 Road Jurisdiction Study (RJC)

227 DOT Growth Management (WATT Group)

Planning, Administration, Management, and Supervision (continued)

Risk Management

21 Basics of Local Road Engineering (Cornell Local Roads Program)

29 Tort Liability of State Highway Transportation Agencies (AASHTO)

75 Tort Liability (What Can Be Done to Minimize It) (Minnesota DOT)

97 Risk Management (Pennsylvania DOT)

102 Caution, Litigation Ahead — The Road to Effective Risk Management (FHWA)

146 The Safer Roadside (WSDOT)

147 Mailboxes May Be Hazardous to Your Health (Texas DOH and FHWA)

176 The Best Defense … Is a Good Road (New York T2)

177 Breakaway Timber Utility Poles (FHWA)

259 Maintenance Tort Liability (Louisiana DOT)

261 Risk Management to Reduce Tort Liability (Texas DOH)

269 The Safer Roadside (WSDOT)

279 Risk Management to Reduce Tort Liability (Texas DOH)

300 Extra Eyes for Maintenance (Pennsylvania DOT)

Miscellaneous

46 Using TRIS (NWT2)

59 Subdivisions: A Local Dilemma (MSU)

82 Guidelines for Spring Highway Use Restrictions (NWT2)

90 First Annual Truck and Loader Rodeo (1987) (WACRS)

104 Truck Impacts on Pavements (FHWA)

140 Emergency Relief (FHWA)

141 Road Jurisdiction Study (LTC)

142 Paving the Way for Tomorrow's Highway (SHRP)

159 The Rural Transportation Assistant Program (NHI)

178 Pedestrian Safety (What Can You Do) (FHWA)

197 Everything Rides on Roads (Allied Video)

227 DOT Growth Management (WATT Group)

228 Paths of Thunder (FECR Co.)

233 No Exit (Operation Lifesaver)

246 1991 AASHTO Technology Transfer Fair (SHRP)

270 Road to Loowit, the Spirit Lake Memorial Highway (WSDOT)

278 Can a PC Help You? (Kansas T2)

327 Stress Management — Supervisors and Employees (Training Network, Inc.)

332 Problems With Gravel Roads (FHWA and LTAP)

Design and Construction

Asphalt Concrete Pavement

1 Bituminous Concrete Paving (WSDOT)

7 Bituminous Plant Inspection (WSDOT)

38 Rolling Plant — Mixed Asphalt Pavements (AI)

43 Asphalt Paving Inspection (Utah DOT and FHWA)

237 Full Depth Reclamation (ARRA)

268 Rehabilitation of Portland Cement Concrete Pavements Using Hot Mix Asphalt Overlays (NAPA)

275 Cold In-Place Recycling (ARRA)

276 Hardsurfacing a Gravel Road Using Pre-Mix Asphalt (Missouri T2)

277 Codington County Solution — Cold Inplace Recycling (South Dakota DOT)

314 Asphalt Overlays: The Four P's (Minnesota DOT)

Bridges (General)

92 Cathodic Protection for Bridges (MSU)

103 Build Better and Save With Modern Timber Bridges (FHWA and USFS)

115 Hardwood Anyone? (Pennsylvania DOT)

236 Timber Bridge 2 (Pennsylvania DOT)

250 Modern Timber Bridges: A New Return for Old New England (Rhode Island T2)

271 Aesthetic Bridge Rails and Guardrails (FHWA)

272 Concrete Bridge Railings
The Modified Thrie Beam Guardrails
Cable Guardrails (FHWA)

Bridge Decks

34 Concrete Bridge Deck Construction (FHWA and Ohio DOT)

37 Low-Slump Dense Concrete for Bridge Deck Restoration and Protection (Iowa DOT)

119 Concrete Bridge Deck Repair (IRF)

131 Concrete Filled Steel Grid Bridge Decks (Pennsylvia DOT)

Banks and Slopes

2 Reinforced Earth Banks (CALTRANS)

27 Keyed Riprap (FHWA)

47 Retaining Wall Design Guides (USFS)

168 Minor Slide Removal (Utah DOT)

Concrete

8 Field Testing — Concrete (WSDOT)

9 Rigid Pavement Maintenance (AI and MSU)

65 Urban Concrete Paving — Strength and Durability (WI Paving Association)

268 Rehabilitation of Portland Cement Concrete Pavements Using Hot Mix Asphalt Overlays (NAPA)

Design and Construction (continued)

General

21 Basics of Local Road Engineering (New York T2)

24 Pavement and Asphalt Techniques (AI and MSU)

27 Keyed Riprap (FHWA)

38 Rolling Plant — Mixed Asphalt Pavements (AI)

44 Designing for Quality — I-90/I-94 in Wisconsin (Wisconsin DOT)

47 Retaining Wall Design Guides (USFS)

265 Harmful Materials Awareness for Design Workers (Pennsylvania DOT)

266 Harmful Materials Awareness for Construction Workers (Pennsylvania DOT)

269 The Safer Roadside (WSDOT)

270 Road to Loowit, the Spirit Lake Memorial Highway (WSDOT)

274 Soil Stabilization: Selecting the Modifier (FHWA)

275 Cold In-Place Recycling (ARRA)

276 Hardsurfacing a Gravel Road Using Pre-Mix Asphalt (Missouri T2)

Materials and Tests

36 Soil Testing (Oklahoma DOT)

39 Material Sampling and Testing (Oklahoma DOT)

83 Epoxy Coated Reinforcing Bars — Handling, Storage, and Placement (CRSI)

88 Use of Fabrics on Oklahoma Aggregate Surface Roads (Oklahoma T2)

92 Cathodic Protection for Bridges (MSU)

100 Lime — The Versatile Stabilizer in Construction (NLA)

115 Hardwood Anyone? (Pennsylvania DOT)

130 Erosion Control Material Installation — 1985 Demo (Pennsylvania DOT)

241 Proctor Compaction Test (Arkansas T2)

254 Recent Crash Tests of Roadside Safety Hardware (FHWA)

274 Soil Stabilization: Selecting the Modifier (FHWA)

Recycling

5 Recycling Procedures (MSU)

73 Asphalt Recycling in Minnesota (Minnesota DOT)

77 Cold Process Asphalt Renovation and Base Stabilization (E/S Allison)

89 Recycling Roads With Asphalt Emulsions (AI)

139 Uses of Asphalt Rubber (FHWA/NHI/TRAP)

274 Soil Stabilization: Selecting the Modifier (FHWA)

275 Cold In-Place Recycling (ARRA)

277 Codington County Solution — Cold Inplace Recycling (South Dakota DOT)

Job Site Safety

282 Underground Safety: Jobsite Hazards (National Safety Council)

Work Zones Traffic Control

(See this category in the “Maintenance” area.)

Design and Construction (continued)

Traffic Engineering

91 Dead Wrong (Pennsylvania DOT)

176 The Best Defense … Is a Good Road (FHWA and NYT2)

178 Pedestrian Safety (What Can You Do) (FHWA)

179 Highway Capacity, Level of Service, and Characteristics of Traffic Flow for Local Government Officials (Delaware DOT and T2)

190 Traffic Barriers — An Overview (FHWA)

228 Paths of Thunder (FEC)

233 No Exit (Operation Lifesaver)

269 The Safer Roadside (WSDOT)

271 Aesthetic Bridge Rails and Guardrails (FHWA)

272 Concrete Bridge Railings
The Modified Thrie Beam Guardrails
Cable Guardrails (FHWA)

312 Traffic Control Signals at Intersections (IRF)

Maintenance

Maintenance and Roadside Safety

25 Partners in Safety (FHWA)

68 For Safety's Sake (Foresight Products, Inc.)

146 The Safer Roadside (WSDOT)

147 Mailboxes May Be Hazardous to Your Health (Texas DOH and FHWA)

177 Breakaway Timber Utility Poles (FHWA)

189 Digging Dangers (Underground Focus)

191 Liquid Propane (LP) Gas — Know the Facts (FHWA and Texas DOH)

195 Subsurface Utility Engineering (FHWA)

267 Harmful Materials Awareness for Maintenance Workers (Pennsylvania DOT)

269 The Safer Roadside (WSDOT)

272 Concrete Bridge Railings
The Modified Thrie Beam Guardrails
Cable Guardrails (FHWA)

Maintenance Procedures (General)

117 Mechanical Cleaning of Unlined Ditches (IRF)

118 Common Maintenance Problems and Causes (IRF)

119 Concrete Bridge Deck Repair (IRF)

124 Cleaning and Clearing of Bridges (IRF)

125 Cleaning of Lined Ditches, Culverts, and Catch Basins (IRF)

150 Ditch Maintenance (North Carolina)

154 Shoulder Maintenance (North Carolina)

163 Shoulder Maintenance (Utah DOT)

169 Guard Rail Maintenance (Utah DOT)

188 Guardrail Installation and Repair (NWT2)

207 Confined Space Entry (Summit Training)

225 Trench Shields (NSC)

252 Trenching and Shoring — The "Hole" Story (Don Brown Productions)

290 Confined Space Entry — Class 1 Atmospheres (Minnesota DOT)

300 Extra Eyes for Maintenance (Pennsylvania DOT)

331 Chip Seal Applications (FHWA and LTAP)

Cost/Analysis

6 Rehabilitation Options/Cost Analysis (MSU)

16 Road Maintenance Cost Analysis — Part 1 (MSU)

17 Road Maintenance Cost Analysis — Part 2 (MSU)

18 Road Maintenance Cost Analysis — Part 3 (MSU)

19 Road Maintenance Cost Analysis — Part 4 (MSU)

Drainage

22 The Importance of Roadway Drainage (TIE)

27 Keyed Riprap (FHWA)

79 Drainage Pipe Placement (Pennsylvania DOT)

167 Drainage Maintenance (Utah DOT)

247 Fish Passage Through Culverts (FHWA and USFS)

Maintenance (continued)

Hazardous Materials or Conditions

69 Asbestos — Controlling the Hazard (Asbestos Training, Inc.)

71 First On the Scene — Hazardous Material Safety (Chemical Manufacturers Association)

96 Hazardous Materials in Transit (Connecticut DOT)

222 Right to Know (Centurion Video)

295 Working in Confined Spaces (Tel-A-Train)

296 Testing Confined Spaces (Tel-A-Train)

297 Confined Space Safety (Tel-A-Train)

303 Underground Safety: Personal Protection (Construction and General Laborers)

Patching and Crack Sealing

15 Patching and Crack Filling (MSU)

113 Inlay Patching Using a Small Cold Planer (Oregon DOT)

114 Inlay Patching Using a Large Cold Planer (Oregon DOT)

152 Crack Sealing (North Carolina)

251 Maintaining Asphalt Roads (Blade Patching) (New Mexico DOT)

Maintenance Systems

23 Pavement Management Systems (AI and MSU)

42 Traffic Control: Monitoring, Maintenance, Record Keeping (ITE)

82 Guidelines for Spring Highway Use Restrictions (NWT^2)

129 Bridge Maintenance Systems (1987) (Pennsylvania DOT)

132 New Directives in Sign Management (ATSSA)

137 Implementing a Maintenance Management System (FHWA)

138 Implementing an Equipment Management System (FHWA)

186 Pavement Management Systems (USCOE and FHWA)

192 Pavement Management (FHWA)

Gravel and Dirt Roads

28 Stabilization for Low Volume Roads (ARTBA)

61 Upgrading Gravel Roads (MSU)

76 Maintaining Granular Surfaced Roads (Iowa DOT)

81 Maintaining Low-Volume Roads (Pennsylvania DOT)

143 Maintaining Gravel Roads in Arkansas (Arkansas T^2)

149 Maintenance of Gravel Roads (North Carolina)

274 Soil Stabilization: Selecting the Modifier (FHWA)

276 Hardsurfacing a Gravel Road Using Pre-Mix Asphalt (Missouri T^2)

283 Managing and Inspecting Unsurfaced Roads (USACRREL)

332 Problems With Gravel Roads (FHWA and LTAP)

Maintenance (continued)

Seal Coats

12 Bituminous Seal Coats (WSDOT)

14 Seal Coats (MSU)

95 Bituminous Surface Treatment (Pennsylvania DOT)

99 Slurry Seals (J-Pat, Inc.)

135 Bituminous Surface Treatment (WSDOT)

155 Asphalt Chip Seals (North Carolina)

280 Sealcoating: A Matter of Science and Skill (Minnesota Local Research Board)

331 Chip Seal Applications (FHWA and LTAP)

Shop Safety

64 Shake Hands With Danger (Caterpillar Company)

157 Compressed Gases: The Correct Way to Use Acetylene and Oxygen for Cutting (Pennsylvania)

199 Everything to Lose (Caterpillar Company)

285 Single Piece Rim Safety and Multipiece Rim Safety (Industrial Training, Inc.)

Bridge Inspection and/or Maintenance

48 Introduction to Bridge Inspection and Steel Truss Bridge Inspection (FHWA and Oregon DOT)

49 Timber Bridge Inspection in Oregon (FHWA and Oregon DOT)

87 Prestressed Concrete Bridge Inspection (Pennsylvania DOT)

124 Cleaning and Clearing of Bridges (IRF)

129 Bridge Maintenance Systems (Pennsylvania DOT)

145 Pile Cap Replacement (Oregon T2)

162 Bridge Maintenance — Structure Inspection (Utah DOT)

166 Bridge Maintenance — Cleaning and Clearing (Utah DOT)

Potholes

10 Pothole Repair (MSU)

11 Potholes — Causes, Cures, Prevention (USCOE)

107 Pothole Patcher (Delaware DOT)

151 Pothole Patching (North Carolina)

Winter Maintenance

33 White Gold (APWA and UNH)

72 Snow Removal on Iowa's Secondary Roads (Iowa DOT)

80 Planning and Organizing for Winter Maintenance (Pennsylvania DOT)

84 Snowplows and Spreader Operation (Nebraska DOR)

93 Winter Services (Pennsylvania DOT)

110 Plow Power (APWA)

193 Safety Restoration During Snow Removal (FHWA)

203 Winter Driving — Trucks (ATA)

232 Snowplow and Spreader Operation (Delaware DOT)

286 Response to Winter (Pennsylvania DOT)

305 Winter's Winning Team (Bearcat)

Maintenance (continued)

Traffic Control and Safety Devices

20 FHWA Project No. 65 — Maintenance of Highway Safety Hardware (FHWA)

67 Traffic Signal System — Go for the Green (FHWA)

101 Better Inductive Loop Detectors (FHWA and New York DOT)

240 A Striper's Survival Guide (ATSSA)

242 Arrow Panels (FHWA)

254 Recent Crash Tests of Roadside Safety Hardware (FHWA)

264 Right Before Your Eyes (ATSSA)

311 Traffic Sign Placement and Location (IRF)

321 Lightning and Transient Protection of Traffic Controllers: The Nuts and Bolts of Jolts(NCHRP)

330 Sign Maintenance and Installation (FHWA and LTAP)

Work Zones Traffic Control

25 Partners in Safety (FHWA)

26 Traffic Control Work Area Flagging (ITE)

35 Traffic Control: Selection and Use of Devices (ITE)

40 Introduction to Work Area Traffic Control (ITE)

41 Sample Applications of Work Area Traffic Control (ITE)

74 Flagging Procedures and Operations (Minnesota DOT)

78 The Flagger (WSDOT)

133 Nighttime Traffic Control in Work Zones (ATSSA)

136 Traffic Control for Maintenance Work Areas (Utah DOT)

153 Basic Traffic Control (North Carolina)

214 Work Zone Safety for Rural Local Agencies (UNC ITRE and FHWA)

217 The Thin Orange Line (ATSSA)

223 Traffic Control for Urban and Utility Work Zones (ATSSA)

243 Barrier Delineation in Work Zones: The Well Defined Path (FHWA)

244 New Work Zone Safety Devices (SHRP)

263 Life in the Closed Lane (ATSSA)

273 Flagging Operations and Procedures (South Carolina DOH)

284 Traffic Barriers and Control Treatment for Restricted Work Zones (NCHRP)

291 What's Your Orange IQ? (Minnesota DOT)

316 Work Zone Safety TV Clips (WSDOT)

Equipment Maintenance and Operation

Commercial Driver's Licensing (CDL)

180 CDL — Overview (Pennsylvania DOT)

181 CDL — Common Procedures Required for All Classes of Drivers (Pennsylvania DOT)

182 CDL — Transporting Cargo and Air Brakes (Pennsylvania DOT)

183 CDL — Transporting Passengers (Pennsylvania DOT)

184 CDL — Combination Vehicles (Pennsylvania DOT)

185 CDL — Hazardous Material (Pennsylvania DOT)

Trucks Operation (General)

70 Air Brakes — What You Should Know (L&K)

94 Backing — You Owe It to Yourself (Pennsylvania DOT)

204 Skid Control and Recovery (ATA)

205 City Driving (ATA)

206 The Critical Factor (ATA)

208 Tractor — Steering Axle Braking and Stability Test (ICBC)

209 Rollover (MVMA)

210 Front Wheel Brakes — Dispelling a Myth (USDOT)

211 Within an Inch of Your Life (Air Brake Adjustment) (NWAFS)

219 Blind Spots (Centurion Video)

220 Around Your Truck (Centurion Video)

255 Residential Pickup — Driving and Helpers (Don Brown Productions)

Dump Trucks

53 Ten-Wheel Dump Trucks (Deleware DOT)

85 Preventive Maintenance Overview and Dump Truck Operation (Nebraska DOR)

121 Daily Maintenance of Dump Trucks (IRF)

172 Dump Truck Operation — Tandem Axle (Utah DOT)

173 Dump Truck Operation — Working With Pups (Utah DOT)

174 Dump Truck Operation — Preventive Maintenance (Utah DOT)

Loaders

32 Operating Tips: Wheel Tractors-Scrapers, Track Type Loaders, and Wheel Loaders (Caterpillar Company)

54 Loader Operation (WSDOT)

122 Daily Maintenance of Front-End Loaders (IRF)

156 The Business of Backhoe Loader Operation (John Deere)

158 Loader/Backhoe Safety Operation (Case Backhoe)

196 The Hazards of Hurry (Caterpillar Company)

234 Loader/Backhoe Operations — Operator Safety

235 Loader/Backhoe Operations — Worker Safety

256 Rear Loader Operations and Safety (Don Brown Productions)

Equipment Maintenance and Operation (continued)

Motor Graders

50 Motor Grader Operation — (WSDOT) Part 1 — General Components and Start Up

51 Motor Grader Operation — (WSDOT) Part 2 — Maneuvering, Operation, and Shutdown

52 Motor Grader Operation — (WSDOT) Part 3 — Operation Techniques

98 Blading Unpaved Roads (FHWA and NACE)

123 Daily Maintenance of Motor Graders (IRF)

202 Operating Tips — Motor Graders (Caterpillar Company)

313 Motor Grader Preventive Maintenance (New Mexico)

Mowers and Landscaping

86 Mowers (Nebraska DOR)

106 Caution at Work (Stihl)

108 Single Wing Flail Mower (Deleware DOT)

109 Brush Cutter (Deleware DOT)

164 Mowing (Utah DOT)

171 Weed Sprayer Operation (Utah DOT)

Rollers

56 Pneumatic Tire Roller Operation (Utah DOT)

126 Daily Maintenance of Rollers (IRF)

160 Steel Wheel Roller Operation (Utah DOT)

Miscellaneous Equipment

57 Tilt Bed Trailers (WSDOT)

60 Distributor: Preventative Maintenance and Operations (New Mexico DOH)

105 Chain Saw Safety (Stihl)

120 Daily Maintenance of Crawler Tractors (IRF)

170 Tow-Type Sweeper Operation (Utah DOT)

221 Forklift 1: Handling the Vehicle (Centurion Video)

249 Fundamentals of Shielded Arc Welding (GE Weld)

292 Lockout/Tagout Safety Procedures (L&I)

326 Equipment Tiedown — Tilt Bed Trailers (WSDOT)

Equipment Maintenance

31 Equipment Maintenance — Programming and Scheduling (MSU)

63 Winning Moves in Maintenance (Caterpillar Company)

70 Air Brakes — What You Should Know (L&K)

85 Preventative Maintenance Overview and Dump Truck Operation (Nebraska DOR)

116 Daily Maintenance of Asphalt Distributors (IRF)

161 Operation and Maintenance of Air Compressors (Utah DOT)

198 Down is Up (Caterpillar Company)

200 Signals: Read 'Em or Weep! (Caterpillar Company)

210 Front Wheel Brakes — Dispelling a Myth (USDOT)

212 Aluminum Spring Brake Cover Corrosion Investigation (Transport Canada)

257 "S" CAM Brake Adjustment (The Maintenance Council)

287 Heavy Duty Starting and Charging Systems Diagnostics(ATA)

288 Tire Repair Failure Analysis (ATA)

Equipment Maintenance and Operation (continued)

Equipment Safety

62 Multiple Choice (Caterpillar Company)

128 Say it for Safety (Pennsylvania DOT)

201 Roll of Drums (Caterpillar Company)

226 It Always Happens to the Other Guy (John Deere)

258 Chain Saw Safety (Louisiana DOT)

285 Single Piece Rim Safety and Multipiece Rim Safety (Industrial Training, Inc.)

299 The Naked Truth — Chain Saw Clothing (FPSA)

301 Cylinder and Gas Apparatus Safety (CISCO Safety)

315 You May Not Get A Second Chance (Goodyear)

326 Equipment Tiedown — Tilt Bed Trailers (WSDOT)

3:P:AVC1

Explanation of Ratings

A private consultant reviewed many of the tapes in this catalog. Similarly, participants of the Center's "road shows" provided ratings of the tapes that they observed. The two ratings systems are not exactly the same, hence the following chart relates the two systems.

Consultant's Rating System	Weighted Participant's Ratings Used in this Catalog		T2 Van Program (Participants) Rating System
Excellent	4.6 – 5.0	Excellent	Excellent (5)
Good	4.1 – 4.5	Very Good	Good (4)
Not Bad	3.1 – 4.0	Good	
Fair	2.1 – 3.0	Fair	Fair (3)
Poor	Less than 2.1	Poor	Poor (2)
Reject			Very Poor (1)

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1 Bituminous Concrete Paving (3 Parts)

Washington State Department of Transportation
45 minutes

This 1984 training tape for construction inspectors includes three parts: (1) preliminary checks and equipment, (2) surface preparation and tack coats, and (3) delivery of hot mix, paving, compaction, and final project acceptance. The tape emphasizes the importance of proper inspection throughout and is a good basic training tool on the subject.

The tape's message is specifically directed to WSDOT employees who may be involved with asphalt paving projects in Washington State. The procedures and inspection requirements shown are in accord with WSDOT construction standards and specifications and may vary slightly from those used by other agencies. However, the practices discussed in the recording represent good construction practices and are applicable to this type of construction, wherever it is done.

Audiences: The cassette is most useful to asphalt paving construction inspectors who may be directly involved in Washington State construction projects. Other public works engineers and technicians will find the presentation useful as a guide for inspection requirements in their areas.

Overall Ratings: Consultant — Excellent; Participants — Very Good

2 Reinforced Earth Banks

CALTRANS
33 minutes

This tape highlights the 1970s reconstruction of a highway that was devastated by a massive landslide in California. The reconstruction solution was a reinforced earth, skin plate retaining wall. Extensive discussion focuses on the design of this wall including pre-engineering geotechnical surveys and analysis of data. This is an interesting presentation for those taking corrective action around and over massive landslide areas. The video demonstrated one of the first extensive uses of reinforced earth retaining wall systems in the USA.

Audiences: Professional civil or geotechnical engineers, particularly those associated with county roads departments and with federal agencies that are responsible for the roads within their jurisdictions, and civil engineering students.

Overall Ratings: Consultant — Not Bad; Participants — Good

3 Introduction to Asphalt Materials

Asphalt Institute and Transportation Information Exchange (TIE)
26 minutes

This training tape explains the basic types of asphalts, ways to liquefy asphalts, and the various types of asphalt emulsions and why they are used. Covered also are where asphalts come from, the distillation process, and the advantages and uses of specific asphalts. Reference is made to standard Asphalt Institute handbooks throughout the tape.

Audiences: Construction inspectors and maintenance personnel.

Overall Ratings: Consultant — Not Bad; Participants — Very Good

4 Asphalt Pavement Applications

Asphalt Institute and Transportation Information Exchange (TIE)
30 minutes

This discussion centers on the surface applications of fog seals, tack coats, penetrating prime coats, sand seals, slurry seals, and chip seals. Basic design factors affecting seal coats are highlighted. Hot plant mixes for overlay work are described in detail. This is a good basic training aid.

This tape should be shown as a natural follow-up to Tape 3. In spite of its regional emphasis, it does provide a sound and basic explanation of how asphalt materials should be used. The two tapes, 3 and 4, contain information similar to the **Pavement Maintenance and Rehabilitation Series** produced by Montana State University and the Asphalt Institute.

Audiences: Construction and maintenance technicians.

Overall Ratings: Consultant — Fair; Participants — Good

5 Recycling Procedures

Montana State University
39 minutes

This is an instructional-type tape that covers hot and cold asphalt recycling techniques. Limitations on hot recycling are noted as well as the advantages and disadvantages of both hot and cold asphalt recycling. Examples of hot mix recycling projects include projects in Washington and Oregon. The cold mix example is from Illinois. The presentations are by two speakers who were local representatives of the Asphalt Institute and are known to Northwestern audiences.

Audiences: Probably best suited for chief engineers and their supervisors. It may be of interest to students as well.

Overall Ratings: Consultant — Good; Participants — Good

6 Rehabilitation Options/Cost Analysis

Montana State University
25 minutes

This is a **lecture-type presentation**. The tape refers to various pages in an Asphalt Institute Manual (MS-17), Asphalt Overlays and Pavement Rehabilitation. Life-cycle cost analysis of comparing options to rehabilitation is discussed. The tape shows the use of deflection data on charts to define a required overlay thickness. It gives a rather detailed explanation of the process used in the Asphalt Institute Manual (MS-17). Examples are given of comparing life-cycle costs of various pavement design alternatives (concrete and asphalt with various bases). The direct use of the Asphalt Institute's manuals may negate the need for the additional explanation given by this tape.

Audiences: Professional engineers and supervisors involved in defining rehabilitation options and recommending pavement treatments.

Overall Ratings: Consultant — Fair; Participants — Fair

7 Bituminous Plant Inspection (2 Parts)

Washington State Department of Transportation
37 minutes

This 1984 tape covers the “basics” of bituminous plants and their inspection. Subjects include materials, batch plant operations, and drum-mix plants operations. The tape is an excellent overview of bituminous plant operations and inspections and is obviously directed toward plant inspectors and engineering technicians. It is also a good training film to be shown to project engineers at all levels.

Audiences: Professional engineers and supervisors concerned with bituminous plant operations.

Overall Ratings: Consultant — Excellent; Participants — Good

8 Field Testing — Concrete (3 Parts)

Washington State Department of Transportation
34 minutes

This 1984 tape provides the basics on the subject. Part I discusses sampling techniques and temperature considerations. Part 2 explains slump tests and cylinder testing. Part 3 covers air content considerations. This is a good basic training tool. As it is based on WSDOT’s standard specifications for construction and materials, it may be of less interest to out-of-state or federal agency viewers.

Audiences: Professional, supervisors, and construction inspectors.

Overall Ratings: Consultant — Good; Participant — Very Good

9 Rigid Pavement Maintenance (Part V)

Asphalt Institute and Montana State University
25 minutes

This **25-minute lecture** is one of a nine-part workshop produced by Montana State University and the Asphalt Institute. The training aid thoroughly covers the types, causes, and possible solution to defects in concrete pavements. Detailed procedures are presented for reflective cracking. Asphalt Institute Manual No. MS-17 is referenced. The tape concludes with a short question and answer period. The presentation emphasizes the use of asphalt for repairs and touches only lightly on other methods.

Audiences: Professional engineers, construction supervisors, and project designers.

Overall Ratings: Consultant — Good; Participant — Fair

10 Pothole Repair

Montana State University
12 minutes

A brief but clearly defined training tool on pothole repair. Key steps are defined and explained, including (1) signage, (2) marking and cutting, (3) cleaning and tacking, and (4) filling and compaction.

The film presents the best technical method to permanently repair a pothole in an asphalt or PCC pavement. It would be better if its title were **Permanent Repair of Potholes** as this is the approach used. This type of repair is generally more expensive and time consuming in the short-term and is often overlooked because of other immediate problems, funding, and resource shortages. Consequently, short cuts are often made, which end up with a less permanent treatment, but one which solves the immediate problem.

Audiences: Professional engineers, maintenance supervisors, and maintenance workers.

Overall Ratings: Consultant — Good; Participants — Good

11 Potholes — Causes, Cures, and Prevention

U.S. Corps of Engineers
17 minutes

This entertaining tape presents the basic causes, cures, and prevention of potholes. Repair procedures are defined, including 12 steps for resolving the pothole problem. This is an excellent basic training tool.

Some audiences may detect that the tape was made in the northeast portion of the nation and may discount the information for that reason. Regardless of location, potholes are caused by the applied forces of water and age and proper repair and prevention measures are the same everywhere.

Audiences: Professional engineers, maintenance supervisors, and maintenance workers.

Overall Ratings: Consultant — Excellent; Participants — Good

12 Bituminous Seal Coats

Washington State Department of Transportation
16 minutes

This 1984 training tape presents in very clear terms the materials, equipment, traffic control, and work methods for bituminous seal coats. References are made to WSDOT standard specifications, but the concepts and ideas presented are appropriate for the subject.

Audiences: Professional engineers, construction supervisors, and construction workers. It also may be of value to civil engineering students.

Overall Ratings: Consultant — Excellent; Participants — Very Good

13 Pavement Maintenance and Rehabilitation, Part I — Pavement Maintenance

Montana State University
17 minutes

A **lecture-type presentation** including a training course prepared by the Asphalt Institute. The tape shows photos of water damages on pavements. The presentation and examples are extremely elementary and rather drawn out. One important point that the tape makes is that “deferred maintenance will cost more.” The tape can be used as a lead-in to other Asphalt Institute training tapes, but has limited importance if used alone. Some aspects of the presentation are duplicated by Tape 11, **Potholes — Causes, Cures, and Prevention**.

Audiences: Professional engineers, maintenance supervisors, and maintenance workers.

Overall Ratings: Consultant — Fair; Participants — Fair

14 Seal Coats

Montana State University
45 minutes

This very thorough tape covers various types of seal coats including slurry and sand seals. Reference is made to standard Asphalt Institute handbooks. The objectives behind using seal coats are defined. Asphaltic materials, aggregates, processes, and equipment usage are detailed. This is a very methodical presentation on this subject.

Audiences: Chief engineers and project inspectors.

Overall Ratings: Consultant — Not Bad; Participants — Good

15 Patching and Crack Filling (Part IV)

Montana State University
52 minutes

This tape is a **lecture presentation** and is one of the nine-part series of tapes prepared by the Asphalt Institute and Montana State University for the FHWA funded Rural Technical Assistance Program (RTAP). It discusses various types of patching and the repair of cracks, potholes, and other pavement surface distresses. The lecture touches only lightly on the cracking problem in the bituminous treated surfaces so typical of most of the county roads in the rural Northwest. The greatest emphasis in the discussion is on the repair of asphalt concrete pavements. Asphalt concrete pavements are more typical of state highways and city streets.

Types of patching (skin versus deep) are explained. Examples are shown of various types of pavement deterioration, types of cracking, and when action should be taken for repairs. Clear crack repairing steps are given. Slurry seals are also discussed.

Audiences: Chief engineers and supervisors, particularly those who are involved in repair and maintenance of county roads and city streets.

Overall Ratings: Consultant — Not Bad; Participants — Good

16 Road Maintenance Cost Analysis (Series) Part 1 — Equipment Costs

Montana State University
50 minutes

This presentation is the first of a four-part series on road maintenance costs analyses prepared by Montana State University as part of its FHWA funded Rural Technical Assistance Program. The tape explains the basics of equipment management and discusses various depreciation techniques and the importance of properly estimating costs prior to budget preparation. Estimating fuel, gas, oil, and equipment costs is shown. The overhead costs of interest, insurance, and storage are also included.

Audiences: Chief engineers or equipment accountants.

Overall Ratings: Consultant — Good; Participants — Good

17 Road Maintenance Cost Analysis (Series) Part 2 — Maintenance and Operating Costs

Montana State University
50 minutes

This is a tape prepared by Montana State University on the basics of maintenance and operation costs. It takes the audience through the steps of estimating maintenance and operating costs with specific examples for labor equipment materials and overhead. Essentially the tape provides a simple maintenance management system used by many maintenance organizations.

Audiences: Chief engineers, maintenance superintendents, and accountants or controllers.

Overall Ratings: Consultant — Good; Participants — Fair

18 Road Maintenance Cost Analysis (Series) Part 3 — Costs of Deferred Maintenance

Montana State University
50 minutes

This tape is the third of a series of tapes prepared by Montana State University as part of its Rural Technical Assistance Program funded by FHWA. It discusses a basic method of determining the economics of deferring maintenance. Actually, it is a simplified pavement management system in which alternate strategies of road surface treatment are analyzed.

This lecture-type training tape discusses the basics of present values, future values, rate of return of investments and provides examples of economic analysis. The role of inflation and of other considerations in performing economic analysis is also presented. The purpose of economic analysis is to help define what and when certain types of maintenance or construction should be performed.

Audiences: Chief engineers, maintenance superintendents, and accountants or controllers.

Overall Ratings: Consultant — Good; Participants — Fair

19 Road Maintenance Cost Analysis (Series) Part 4 — Presentation of Budget Data to County Commissions and City Councils

Montana State University
50 minutes

The principles of zero-based budgeting are presented, and examples are included. This tape emphasizes the importance of proper budget presentations so that everyone can see the benefits, priorities, and services that are to be provided by a proposed budget or program.

Editor's Note: There are several concepts on budgeting; zero based budgeting is one. The components of each are similar. Local governments may use their own, for example, one locality might use a system called "performance budgeting," and another might use a lump sum budget. Since Washington State uses a performance budget system which is controlled by the state's BARS manual, the film may cause some controversy is shown to Washington State audiences. However, there is nothing wrong with the zero based budget approach as it causes the person preparing the budget to justify or rejustify each program at the beginning of each budget period. The lecture's discussion on the "red line" location could be expanded to reflect the more realistic idea of reducing some benefits above the red line to compensate for those below — those which theoretically would not exist if not funded.

Audiences: Nonprofessional engineers such as city councilmen or county commissioners could appreciate this film. It should definitely be shown to county and city engineers and their financial people with the understanding that the system shown and discussed is only one of many ways to prepare and present a budget.

Overall Ratings: Consultant — Not Bad; Participants — Very Good

20 FHWA Project No. 65 — Maintenance of Highway Safety Hardware (Parts 1 & 2)

FHWA
190 minutes

Module 1 — Introduction and Clear Zone (Part 1)	40 Min.
Module 2 — Traffic Barriers (Part 1 & 2)	88 Min.
Module 3 — Crash Cushions (Part 2)	28 Min.
Module 4 — Luminaire Supports (Part 1)	9 Min.
Module 5 — Sign Supports (Part 2)	25 Min.

Major topics of roadside hardware maintenance are covered in five separate modules. These training tapes were used as part of FHWA's demonstration project no. 65, which has the same title. This series of modules provides maintenance workers and others with specific guidelines for maintaining and repairing safety hardware. Step-by-step procedures, crash testing, and a short quiz are included in the tapes. Any of the specific modules can be shown alone; however, it is recommended that Module 1 — Introduction, also be included.

Editor's Note: When used for training personnel on the maintenance of highway safety hardware, the tapes provide an excellent means to develop the needed understanding of why the features in use on highways were designed as they were and why they need proper attention. If shown outside a workshop environment, the tape might be less interesting and might lose the audience's attention because of its length.

The only criticism involves an oversight by the producers of the film clip on the repair procedures of guardrails, in which workers were not wearing hard hats or colored safety vests. This practice is contrary to safety rules in most areas.

Audiences: Chief engineers and their supervisors. It could be shown to county commissioners or city councils. The film may be of interest to others, but it pertains primarily to state highways.

Overall Ratings: Consultant — Good; Participant — Fair

21 Basics of Local Road Engineering

Cornell Local Roads Program
60 minutes

This clip overviews local road engineering more than it concentrates on specific details of design construction or maintenance of local roads. It is best suited for establishing an appreciation of proper design, construction, and maintenance by city and county officials and the public interested in transportation systems

The tape covers basic design considerations for rural roads. Subjects covered include capacity, geometrics, drainage, pavements, and safety. Examples of inadequacies of each of these are vividly shown. Frost heaves, pavement life curves, signage, and many more details are given. This is an excellent basic training film on this subject.

Audiences: Since this is a general film, it is suitable for most audiences. Particular attention should be given to presenting it to city and county officials and the public interested in transportation systems. Chief public works engineers should also be included. Since it is essentially an educational or documentary film, it can also be shown to county or city or state workers without fear of controversy.

Overall Ratings: Consultant — Good; Participants — Good

22 The Importance of Roadway Drainage

Transportation Information Exchange (TIE)
60 minutes

This **lecture-type training tape** emphasizes the importance of good roadway drainage. This is a basic tape on the subject without extensive details, but it covers the subject well. The need for a proper inventory of culverts, drainage areas, and problem areas is stressed. The tape shows good photos of rural roads in Vermont and their drainage deficiencies. Reference is made to Vermont local or state rules and regulations.

Audiences: Chief engineers and their maintenance supervisors.

Overall Ratings: Consultant — Good; Participants — Good

23 Pavement Management Systems (Part III)

Asphalt Institute and Montana State University
30 minutes

This tape is a **lecture presentation** and is the third of a series of nine tapes on asphalt pavement maintenance and rehabilitation. It explains methods by which rehabilitation strategies and priorities can be determined.

This audiovisual presents the details of deterioration curves of pavement. It explains the benefits of resurfacing and/or reconstruction prior to extensive deterioration. Reference is made throughout to the manual, *Techniques for Pavement Maintenance and Rehabilitation Using Asphalt* by the Asphalt Institute and Montana State University. Reference is also made to other material on deterioration curves. Most of the data is from 1975; however, the principles are still valid.

Audiences: Chief engineers and their supervisors, particularly those in those maintenance area.

Overall Ratings: Consultant — Not Bad; Participants — Good

24 Pavement and Asphalt Techniques (Part II)

Asphalt Institute and Montana State University
55 minutes

This tape is a **lecture presentation** and is the second part of a nine-part series. It provides a discussion of the elementary principles of pavement design and the manufacture of asphalt material. Asphalt Institute manuals are used as references to cover a broad spectrum of factors affecting pavement design, construction, and maintenance.

This tape presents a lecture on the elementary principles of pavement design and asphalts. It starts with emphasis on good drainage to keep the base and subbase dry and also on correcting cracks and weak subbases. Reference is also made to the Asphalt Institute's Thickness Design Manuals. Factors affecting pavement design are listed: design life, number and types of vehicles, subgrade strength, type of soil, etc. This tape gives a very elementary introduction to asphalt sources, types (paving, cutbacks, emulsions, etc.), and the manufacture of asphalt and various specification terms (e.g., viscosity, penetration rates, etc.). It includes a general discussion on types of emulsions (anionic, cationic, nonionic) and types of asphalt pavements (plant mix, road mix, spray applications). A question and answer period from members of the audience completes the tape presentation. Expect rather hard to read visuals and a classroom-type presentation.

Audiences: Construction and maintenance foremen and selected workers.

Overall Ratings: Consultant — Not Bad; Participants — Good

25 Partners in Safety

Region 10, FHWA
13 minutes

An audiovisual on safety which emphasizes the importance of cooperation between the contractor, the driver, and the construction worker. An interesting and entertaining tape for general audiences. It is a useful film for introducing audiences to training and safety matters.

Audiences: Nonprofessionals and chief engineers.

Overall Ratings: Consultant — Fair; Participants — Very Good

26 Traffic Control Work Area Flagging

Institute of Transportation Engineers (ITE)
23 minutes (Copyrighted)

This short tape thoroughly explains the principles of and procedures for proper flagging operations under various conditions. Specific guidelines are given for the flagger whether he or she is using flags or paddles. Examples of various traffic control needs are given and examples of good and inadequate flagging is illustrated. Safety is emphasized throughout. This is a good flagger basic training tape.

Editor's Note: Some of the effectiveness of this very important film is lost because of the poor quality of the slides used to illustrate points raised in the discussion. Most of them are of actual scenes but are very busy and complicated. The charts showing work zone traffic protection layouts also have poor contrast. The message provided by the film, however, is very good, and is important in view of the reality of tort liabilities, which are increasing.

Audiences: Chief engineers, supervisors, and construction and maintenance workers.

Overall Ratings: Consultant — Not Bad; Participants — Good

27 Keyed Riprap

FHWA
12 minutes

This 12-minute documentary film illustrates the construction of a keyed rock blanket on a river in Oregon State by the Oregon State Department of Highways, using the technique developed by the Corps of Engineers. Keyed riprap was selected in this case because of its lower cost and greater permanency when compared to other forms of riprapping.

The film is concisely and professionally done. Note that county or city engineers may have limited use for this technique because of their decreased need, but the tape should be of general interest to those who have riprap problems.

Audiences: Professional engineers and supervisors. The film may also be of interest to civil engineering students.

Overall Ratings: Consultant — Good; Participants — Very Good

28 Stabilization for Low Volume Roads

ARTBA
11 minutes (Copyrighted)

This short training tape clearly describes the procedures, types of materials, and advantages of road stabilization. The tape notes that soil stabilization is not new, but that a rebirth of ideas started in the 1920s. Today's unpaved roads could benefit greatly at minimum costs using road stabilization techniques. An excellent training and informational tape especially for those people responsible for the construction and maintenance of low volume roads.

Audiences: Best suited for professional engineers and road supervisors, but may be of interest to civil engineering students.

Overall Ratings: Consultant — Good; Participants — Good

29 Tort Liability of State Highway Transportation Agencies

AASHTO
51 minutes

This videotape represents AASHTO's attempt to acquaint transportation administrators and engineers with the growing threat of tort claims against them and their agencies because of changes in law, public attitudes, and loss of sovereign immunity. The tape defines factors influencing tort liabilities, discusses sovereign immunity, gives examples of legal defenses, and provides suggestions on workers' conduct, particularly as it affects their involvement in tort claims. There are four major parts in the tape which can be shown separately if needed:

1. Introduction and definition of tort liability (0 to 339).
2. Sovereign immunity (339 to 613).
3. Legal defenses and examples (613 to 934).
4. Suggestions for worker conduct (934 to the end of the film).

Audiences: Transportation administrators, chief engineers, and their supervisors.

Overall Ratings: Consultant — Good; Participants — Good

30 Highway Runoff Water Quality

Washington State Department of Transportation
33 minutes

This 1984 audiovisual highlights a research project on this subject sponsored by the WSDOT and conducted by the University of Washington. The three parts presented include (a) a summary of the research project, (b) an introduction to an impact assessment guide for highway runoff water quality, and (c) examples on the use of the guide. Goals of the research project were (1) to replace the need for future highway runoff water quality studies, (2) to reduce the costs of future studies, and (3) to define the impacts of water quality. This training tape provides the basic tools to do impact evaluations of highway runoff for specific projects.

The film is a good resource for special interests, such as those who are considering the design of a roadway or existing roadway improvement. It is particularly interesting to note one of the major conclusions, that grassy runoff zones filter pollutants from highway runoff, and it emphasizes the value of maintaining vegetation in runoff zones.

Audiences: Professional engineers, roadway designers, and students of civil engineering.

Overall Ratings: Consultant — Not Bad; Participants — Good

31 Equipment Maintenance — Programming and Scheduling

Montana State University
46 minutes

This 46-minute tape is a **lecture presentation** and was prepared by the Montana State University as part of its Rural Technical Assistance Program sponsored by the Federal Highway Administration. The lecture by Mr. Valenti presents a practical approach to assuring reasonable maintenance of fleet equipment used in the construction and maintenance of city streets. The film addresses rural counties in Montana, but the concepts could apply elsewhere.

The tape stresses the importance of proper programming and maintenance scheduling. This chalk-talk presentation notes the need for continuous equipment checks, maintenance done on schedule, and timely repairs after breakdowns. The tape shows a system for maintaining an inventory of parts and examples are given. Emphasis is on good bookkeeping and proper paperwork by operators, mechanics, and others.

Audiences: Professional engineers and equipment fleet managers.

Overall Ratings: Consultant — Excellent; Participants — Fair

32 Operating Tips: Wheel Tractors-Scrapers, Track Type Loaders, and Wheel Loaders

Caterpillar Company
56 minutes (Copyrighted)

This is a training tape for heavy equipment operators on operating techniques and shutdown procedures for each of the three types of equipment listed in the title. Very detailed data is presented on before-operations checks, operating techniques, and shutdown procedures. Examples are shown of proper and improper loading techniques. The tape's emphasis is on safe and efficient operation of the three types of machines.

Audiences: Professional engineers and supervisors and heavy equipment operators.

Overall Ratings: Consultant — Not Bad; Participants — Very Good

33 White Gold

N.E. Chapter APWA and the University of New Hampshire
25 minutes (Copyrighted)

This 25-minute documentary discusses the numerous types of snow removal equipment and procedures that are used in the northeast region of the nation. Advantages and disadvantages of each type of equipment are discussed. Of interest may be the special equipment used in the northeast, such as sidewalk snow removal equipment.

Editor's Note: This regional film discusses one area's approach to snow and ice control. It is regionally made and influenced, and illustrates methods developed under conditions and pressures not necessarily found in the northwest region of the nation. However, some of the points and information discussed are universal and could be useful to stimulate ideas for better equipment purchases for uses here in the west.

Audiences: Professional engineers and maintenance supervisors.

Overall Ratings: Consultant — Fair; Participants — Very Good

34 Concrete Bridge Deck Construction

FHWA and Ohio Department of Transportation
27 minutes

The complete process of building a quality bridge deck is described in this tape. Included are the major steps of material testing, positioning of structural steel, formwork, reinforcing steel, placement checks prior to pour, and the placement and curing of the concrete deck. The tape's emphasis is on proper planning to get quality construction which will require minimum future maintenance.

Editor's Note: The tape is well prepared and, although produced in Ohio, reflects state-of-the-art concrete deck construction. Note that some contractors constructing smaller bridges may use different forming, steel placement, and screed adjustments; thus, they may find the film a bit out of place.

Some of the inspection hints presented may be of value to all those who are involved in bridge construction. The idea that there is no substitute for good planning and proper execution of work is sound.

Audiences: Professional engineers and construction supervisors and inspectors. The tape may also be of interest to civil engineering students.

Overall Ratings: Consultant — Excellent; Participants — Very Good

35 Traffic Control: Selection and Use of Devices

Institute of Transportation Engineers (ITE)
35 minutes (Copyrighted)

This tape is the second in a series of five prepared by the Institute of Transportation Engineers as a training device for transportation engineers. The discussion concerns the basic criteria for selecting traffic control devices for use in work areas. These criteria include the following objectives: (1) getting work done, (2) keeping traffic moving with minimum interruption, and (3) maintains the safety of both the worker and the motorist.

The message presented in this tape is important for both construction and maintenance personnel. Because of its importance, this film and the others in the series are probably best suited for presentation during crew safety meetings or other work associated gatherings which are led by crew supervisors or safety officers. The tape is part of a series on traffic control. This tape particularly needs Tape 40, **Introduction to Work Area Traffic Control**, presented as an introduction. The other films in the series include films 26, 40, 41, and 42. Note that this series also complements and could be used as the follow-up of Tape 29 on torts.

Audiences: Professional engineers and all construction and maintenance personnel.

Overall Ratings: Consultant — Good; Participants — Good

36 Soil Testing

Oklahoma Department of Transportation
55 minutes

This tape presents the detailed procedures for five AASHTO soil tests. It is a good technical training tool for those individuals who must perform the following soil tests:

- AASHTO T-88 Particle Size Analysis of Soils
- AASHTO T-89 Determining the Liquid Limit of Soils
- AASHTO T-90 Determining the Plastic Limit and the Plasticity Index of Soils
- AASHTO T-205 Density of Soils by Rubber Balloon Method
- AASHTO T-238 Density of Soils by Nuclear Methods (MSU)

The first three tests are laboratory tests. The latter two tests are field tests, so they could be shown to inspectors who may not have had training in this area. Local specifications may require modifications to these tests; however, the procedures used are generally accepted throughout the nation.

Audiences: Soils laboratory technicians and civil engineering students. It should be an option for showing to construction technicians who are responsible for the density inspection on highway construction.

Overall Ratings: Consultant — Fair; Participants — Fair

37 Low-Slump Dense Concrete for Bridge Deck Restoration and Protection

Iowa Department of Transportation
20 minutes

This training tape describes a complete project in Iowa. Iowa has been using low-slump dense concrete to repair concrete bridges since 1974. All the required steps are clearly shown and described. This is a good training film for the repair of deteriorated bridge decks.

Audiences: Chief engineers, bridge engineers, and civil engineering students. The film may be of interest to those construction inspectors who might become involved in such a project.

Overall Ratings: Consultant — Good; Participants — Good

38 Rolling Plant — Mixed Asphalt Pavements

The Asphalt Institute
11 minutes

This tape is copied from a relatively old film, but presents the basic concepts and equipment for compacting asphalt pavements. Six types of roller operations are described: compacting at transfer joints, longitudinal joints, edge breakdown, second and finishing rolling. The use of portable vibrators and hand tamping are briefly explained.

The equipment shown is relatively old and is probably not similar to the machines most contractors currently use and probably does not reflect current construction specifications. However, the basic concepts of rolling asphalt pavements have not changed much, so it will provide good instructions to audiences, particularly those who are inexperienced in asphalt pavement construction and inspection.

Audiences: Construction inspectors.

Overall Ratings: Consultant — Not Bad; Participants — Good

39 Material Sampling and Testing

Oklahoma Department of Transportation
55 minutes

This tape explains the methods and equipment needed to complete AASHTO tests T-99, moisture density, 5.5-pound rammer; and AASHTO T-27, fine/coarse aggregate sieve analysis. The explanation of the procedures used for these very detailed tests may be useful for laboratory technicians doing these types of soil tests, but probably has little value to field engineers.

Audiences: Soils labs technicians or civil engineering students.

Overall Ratings: Consultant — Fair; Participants — Fair

40 Introduction to Work Area Traffic Control

Institute of Transportation Engineers (ITE)
31 minutes (Copyrighted)

This training tape presents an overview to the subject of work area traffic control, and introduces a series of five tapes discussing various aspects of work area traffic control. The other tapes are 26, 35, 41, and 42. Factors to be considered in traffic control are outlined, and the tape briefly discusses types of work (stationary, mobile, or moving operations). Channelization devices, sign types, and types of facilities are described.

When viewed in its proper sequence, the film provides an excellent introduction and examples of signing and traffic control procedures. The film offers various tips on what to consider when establishing traffic control for construction or maintenance work projects. It is a duplicate of ITE's Tape No. 1100. Standing alone, this tape may contain enough detail for the subject.

Audiences: Construction and maintenance supervisors and workers. It's an optional film for showing to professional engineers.

Overall Ratings: Consultant — Good; Participants — Good

41 Sample Applications of Work Area Traffic Control

Institute of Transportation Engineers (ITE)
28 minutes (Copyrighted)

This tape is the third of a series of five tapes on work area traffic control prepared by the Institute of Transportation Engineers. It provides specific examples of work control procedures for moving, mobile, and stationary work area operations. The discussion emphasizes the need for a Traffic Control Plan and the use of common sense and good judgment.

Examples of poor traffic control procedures are discussed. The Manual of Uniform Traffic Control Devices (MUTCD) is the basis for the film and its examples. The film generally is well done except that the graphics could have had better contrast. It is a duplicate of ITE's Tape 1300 and repeats some of the materials in Tape 40, **Introduction to Work Area Traffic Control.**

Audiences: Construction and maintenance field supervisors and personnel.

Overall Ratings: Consultant — Good; Participants — Good

42 Traffic Control: Monitoring, Maintenance, Record Keeping

Institute of Transportation Engineers (ITE)
15 minutes (Copyrighted)

This tape is the last of a five-part series on traffic control prepared by the Institute of Transportation Engineers. It provides pertinent information regarding the planning and implementing a traffic control device system in construction or maintenance work areas. It emphasizes the need to monitor and maintain records, in addition to maintaining the devices in order to reduce the potential for tort claims.

Editor's Note: The message in this tape and the others accompanying it covers areas important enough that the tapes should be reviewed periodically by all engineers and technicians who work on or supervise projects on operating highways or county roads or city streets. Although the examples shown are primarily of state highways, the principles involved apply to all jurisdictions. The presentations in all the films are good. The only criticism is that the clarity of some of the slides could have been improved. It is a duplicate of ITE's Tape No. 1500.

Audiences: Chief engineers and all supervisors and personnel involved in construction or maintenance projects.

Overall Ratings: Consultant — Excellent; Participants — Good

43 Asphalt Paving Inspection

Utah Department of Transportation and FHWA
28 minutes

This 28-minute tape discusses the various types of asphalt mixing plants, plant inspection, the asphalt paving placement inspection, and testing of sample procedures, which includes nuclear testing. This training tape emphasizes proper inspection and worker safety. It provides a concise overview of the asphalt paving process. It is valuable as a training film because it provides examples of the state-of-the-art of asphalt paving.

Audiences: All construction personnel including professional engineers, supervisors, and technicians. It could possibly be useful to civil engineer students who may eventually be involved in highway construction.

Overall Ratings: Consultant — Excellent; Participants — Good

44 Designing for Quality — I-90/I-94 in Wisconsin

Wisconsin Department of Transportation
31 minutes

This interesting videotape is a documentary of the design decisions concerning the reconstruction of a 30-mile concrete highway, I-90 and I-94 in Wisconsin. Problems in the reconstruction included the need to contain heavy traffic, including heavy trucks and recreational vehicles; deteriorated pavements; and a relatively short construction season. Special design considerations are discussed in the film: cement concrete recycling, stage construction, the use of epoxy rebars, and other unique items.

Editor's Note: The tape touches upon several construction methods which are unique to the project but can be used in other areas; for example, problems with breaking mesh reinforced concrete, recycling concrete, aggregate moisture control, PCC aggregates, and stage construction procedures, are universal. This film could serve as a model for state highway departments which are becoming involved in the major reconstruction or improvement of their highway systems. It will be of interest to some people who deal with public relationships and highway construction impacts. The film probably has little value to small cities and counties because they rarely are involved in such large projects.

Audiences: Professional engineers, construction supervisors, and possibly civil engineering students.

Overall Ratings: Consultant — Not Bad; Participants — Good

45 Speciality Maintenance Products (Part IX)

Asphalt Institute and Montana State University
31 minutes

This tape is a **lecture presentation** and completes the nine lectures on the general subject of asphalt and its uses sponsored by Montana State University and the Asphalt Institute. It was recorded as part of the Montana State UniversityÆs Rural Technical Assistance Program. The lecturer discusses several proprietary products used in pavement maintenance, including rejuvenators or recycling agents, surface sealers, crack sealers, fabric and membrane interlays, and patching materials, including asphalt roll roofing. Various photos or slides depict using these materials on roads, streets, parking lots, and airports.

Audiences: Professional engineers and supervisors.

Overall Ratings: Consultant — Fair; Participants — Fair

46 Using TRIS (Transportation Research Information Service)

Northwest Technology Transfer Center
13 minutes

This brief tape explains how to use the Transportation Research Information System (TRIS) to obtain information on numerous transportation oriented subjects. Examples for using the system include a researcher, a county engineer, and a transit manager.

The tape provides concise instructions on how a person interested in any aspect of transportation can obtain a complete reference list on that subject.

Audiences: Professional engineers, planners, managers, and civil engineering students involved in transportation.

Overall Ratings: Consultant — Excellent; Participants — Good

47 Retaining Wall Design Guides

USDA — Forest Service Region 6
22 minutes

This training tape presents the material included in a design manual of the same title. Various types of walls and materials are explained and numerous photos of the actual construction of these walls in various parts of our national forests are shown. The subjects covered include metal bins, crib walls (timber and concrete), gabion walls, concrete, and others. The tape highlights the things management must consider before deciding upon a type of improvement. Design considerations discussed include the type of soil, earth pressures, backfill requirements, and geotechnical data.

Editor's Note: Although the guide is prepared primarily for Forest Service personnel, it represents a good primer on small and medium size retaining wall design and construction, useful for any engineer or agency. Some state and county transportation agencies probably use more exotic designs, but the examples shown are very practical and probably most cost effective along low-volume state, county, and city roads.

Audiences: Chief engineers and designers.

Overall Ratings: Consultant — Good; Participants — Good

48 Introduction to Bridge Inspection and Steel Truss Bridge Inspection

FHWA and Oregon Department of Transportation
24 minutes and 50 minutes respectively

This training tape was developed for bridge inspectors in Oregon. The introduction explains the 1978 Surface Transportation Act as it pertains to mandatory inspection of all bridges in a two-year cycle. Federal and ODOT inspection forms are explained. The two-rating system consists of conditional rating (condition as compared to the new bridge) and appraisal rating (condition and function as compared to existing standards). Safety is emphasized for inspectors.

Part 2, Stress Truss Bridge Inspection, shows the actual inspection of typical, older steel truss bridges. Procedures, equipment, inspecting, and completion of standard forms are highlighted. This is a very informative and detailed training film useful to local engineers and inspectors.

Audiences: Professional engineers and bridge inspectors.

Overall Ratings: Consultant — Excellent; Participant — Good

49 Timber Bridge Inspection in Oregon

FHWA and Oregon Department of Transportation
50 minutes

This training tape describes the inspection of two timber bridges in Oregon. The tape takes the audience through the procedures, tools, and forms needed to inspect timber bridges thoroughly.

It presents the state-of-the-art of timber bridge inspection and discusses items the inspector should look for during an inspection. This is a very detailed and good tape on this subject and is useful to local engineers and bridge inspectors.

Audiences: Professional engineers and bridge inspectors.

Overall Ratings: Consultant — Excellent; Participants — Very Good

50 Motor Grader Operation

Part 1 — General Components and Start Up
WSDOT
17 Minutes

This video is one of three on motor grader operations. This series is designed to give new operators a start in learning the operation of any type of motor grader. This part discusses the general components of a grader and recognized start-up procedures necessary for proper equipment operation in a good preventive maintenance program.

Audiences: State, county, or city work force, particularly those involved in maintenance.

Overall Ratings: Consultant — Excellent; Participants — Good

51 Motor Grader Operation

Part 2 — Maneuvering, Operation, and Shutdown
WSDOT
16 Minutes

This video is one of three on motor grader operations (see #50). This segment discusses maintenance.

Audiences: State, county, or city work force, particularly those involved in maintenance.

52 Motor Grader Operation

Part 3 — Operation Techniques
WSDOT
21 Minutes

This last segment of the motor grader operation series illustrates some grader operating techniques in the field (see #50). Six important steps for proper operations are emphasized. These include (1) looking at work ahead, which includes looking for overhead obstacles and for underground utilities; (2) positioning the grader; (3) setting the blade for work; (4) selecting the transmission gear, using low range; (5) driving straight ahead; and (6) making as few changes to the blade as possible.

Audiences: State, county, or city work force, particularly those involved in maintenance.

Overall Ratings: Consultant — Excellent; Participants — Very Good

53 Ten-Wheel Dump Trucks

Delaware Department of Transportation
22 minutes

This video presents the start-up, operation, and shutdown procedures for ten-wheel dump trucks. The start-up inspections follow the usual procedures required by most equipment preventative maintenance programs. The discussion features transmission, gearing, and shifting instructions. The importance of following proper shutdown procedures is emphasized.

Audiences: State, county, or city work forces, particularly those involved in maintenance.

Overall Ratings: Consultant — Excellent; Participants — Very Good

54/55 Loader Operation

Washington State Department of Transportation
35 minutes

Part 1 — Inspection, Startup, Controls, Shutdown — 20 minutes

This tape is the first of two tapes for training loader operators. It features (1) pretrip inspections, (2) start-up procedures, (3) loader controls, and (4) shutdown procedures. It also illustrates important features of an equipment management preventative maintenance program.

Audiences: State, county, or city work forces, particularly those involved in maintenance.

Overall Ratings: Consultant — Excellent; Participants — Good

Part 2 — Operations and Maneuvering — 15 minutes

This part features suggestions on maneuvering loaders and their operation. The recording illustrates operations in a stockpile site and while loading trucks. It emphasizes that the tape is a start to show new operators the capabilities of a machine and their responsibility for daily machine maintenance. Experienced operators will pick up some useful details on loading operations from the video recording.

Audiences: State, county, or city work forces, particularly those involved in maintenance.

Overall Ratings: Consultant — Excellent; Participants — Excellent

56 Pneumatic Tire Roller Operation

Utah Department of Transportation
18 minutes

This audiovisual presents the “basics.” The five segments include (1) daily checks, (2) start-up and warm-up, (3) basic operation, (4) rolling techniques, and (5) shutdown. The tape’s emphasis is on safety, doing a good job, and continuous checks in order to prevent breakdowns. This short tape is useful to beginning operators and as a refresher for more experienced roller operators.

Audiences: Equipment operators.

Overall Ratings: Consultant — Excellent; Participants — Good

57/58 Tilt Bed Trailers

Washington State Department of Transportation
27 minutes

Part 1 — Inspection, Hookup, Equipment Loading — 15 minutes

This is a video recording developed by Washington State Department of Transportation's training office on the use of tilt-bed trailers. The recording emphasizes prestart inspection, trailer hookup procedures, and equipment loading prior to hauling. It also illustrates the proper way to load equipment on a lowboy trailer. The prestart inspection is an important function of most equipment management preventative maintenance programs.

Audiences: Equipment operators and truck drivers.

Overall Ratings: Consultant — Excellent; Participants — Good

Part 2 — Hints on Operation, Loading Procedures — 12 minutes

This video recording supplements Part 1 and features practical hints on trailer towing, unloading procedures, loading, and loading and hauling pipe materials.

Audiences: Equipment operators and truck drivers.

Overall Ratings: Consultant — Excellent; Participants — Good

59 Subdivisions: A Local Dilemma

Montana State University
30 minutes

This tape was prepared by the T2 Center of Montana. Even though the discussion and examples focus on Montana's cities and towns, the basic principles of and reasons for proper planning and regulations are applicable to other locations. This is a basic training tool that includes special site examples in Kalispell, Bozeman, and other Montana towns. Emphasis is placed on the fringe areas of existing urban areas.

Audiences: General, commissioners, public works directors, and planners.

Overall Ratings: T2 Manager — Good; Participants — Good

60 Distributor: Preventive Maintenance and Operations

New Mexico State Highway Department Training Academy
36 minutes

This is an entertaining and interesting tape covering the basics of preventative maintenance for an operation of a 600-gallon asphalt spreader. The specific steps of preventative maintenance and various safety checks before and during operation are defined.

Audiences: Maintenance personnel and supervisors.

Overall Ratings: T2 Manager — Excellent; Participants — Excellent

61 Upgrading Gravel Roads

Montana State University
21 minutes

This tape has two parts. The first part explains the importance of gravel roads in rural areas (examples are from Montana). The tape highlights problems such as poor materials, narrow rights-of-way, decreasing budgets, and lack of equipment. An example is given of using on-the-site materials, crushing shale aggregate, grading ditches, and cold recycling an existing thin asphalt pavement into a new base material.

The second part shows that the Montana Department of Transportation used a near-site mixer to add asphalt and water to sand and gravel in order to create a good bases on I-90. This technique is recommended for counties and cities that lack good base materials. A clip seal then can be overlaid. Results for the subbase were very good on the I-90 project.

Audiences: Engineers, superintendents, and maintenance workers.

Overall Ratings: T2 Manager — Excellent; Participants — Good

62 Multiple Choice

Caterpillar Company
24 minutes (Copyrighted)

The film deals with safer heavy equipment operation. Carefully reconstructed accident situations are freeze-framed at the actual moment of judgment and the audience is asked to spot the hazard before the screen action resumes. The film was produced in cooperation with the National Safety Council.

Audiences: Equipment operators and supervisors.

Overall Ratings: T2 Manager — Excellent; Participants — Excellent

63 Winning Moves in Maintenance

Caterpillar Company
16 minutes (Copyrighted)

This film's subject is managing maintenance. It offers practical, common-sense ideas, gained from interviews with successful contractors and Caterpillar service specialists.

Audiences: Equipment operators and maintenance personnel.

Overall Ratings: T2 Manager — Excellent; Participants — Excellent

64 Shake Hands With Danger

Caterpillar Company
23 minutes (Copyrighted)

This film has a message for all who work with heavy machinery and common shop tools — primarily mechanics, helpers, lube personnel, and fuel personnel. Realistic accidents, selected with help from the National Safety Council, makes the film's warning loud and clear.

Audiences: Supervisors and maintenance personnel.

Overall Ratings: T2 Manager — Excellent; Participants — Excellent

65 Urban Concrete Paving — Strength and Durability

Wisconsin Concrete Pavement Association
15 minutes

This promotional film on concrete pavements highlights Appleton, Wisconsin's experience. Various techniques of using slip form pavers are presented. Appleton's Public Works Director discusses the advantages of using concrete cement in lieu of asphalt for urban streets.

Even though of a promotional nature, Appleton's experiences may be informative to other public agencies who are considering using concrete pavements.

Audiences: General.

Overall Ratings: T2 Manager — Good

66 Traffic Signal Systems — Go for the Green

Part One — General
FHWA
13 minutes

This short tape provides a brief overview of traffic signal systems. Basic terms are explained, for example, signal timing, phases, offsets, timing plans, etc. Computer programs are noted that allow for either arterial progression or else for analyzing a complete urban network. Importance of proper control system is stressed in order to reduce travel time, fuel usage, and/or accidents. Results of a California study showed Benefit/Cost ratio of 16/1.

Audiences: General.

Overall Ratings: T2 Manager — Good

67 Traffic Signal System — Go for the Green

Part Two — Technical
FHWA
15 minutes

A short presentation of the technical aspects of modern urban traffic signal systems. Included are examples of controllers, control centers, transmission devices of microwave, hard wire, and laser optics. Reference is made to an abundance of publications to help the traffic engineer do a better job for urban signal systems. UTCS, NETSIM, TRANSYT-7F are explained briefly. The importance of proper maintenance is stressed as many signal systems are not maintained. Formal courses are noted that also help — FHWA, NHI, T2 Centers.

Audiences: Traffic engineers and technicians.

Overall Ratings: T2 Manager — Good

68 For Safety's Sake

Foresight Products, Inc.
11 minutes (Copyrighted)

This copyrighted 1985 film dramatizes the importance of having safe sign and mailbox posts on our highways. The company's V-Loc Socket System is shown being tested by the Texas Transportation Institute (TTI). Even though not formally adopted by FHWA or the TTI, various states and FHWA have accepted the device. Technical details and literature may be obtained through Foresight Products, Incorporated, 10780 Irma Drive, Unit 22, Northglen, Colorado 80233.

This short interesting film provides a simple way to increase safety of sign and mailbox supports.

Audiences: Useful to specification writers, public works directors, city administrators and/or road supervisors.

Overall Ratings: T2 Manager — Good; Participants — Good

69 Asbestos — Controlling the Hazard

Asbestos Training, Inc., 1985
30 minutes

The short tape explains: (1) what asbestos is, (2) how it is used, (3) its health hazards, (4) protection measures, and (5) engineering costs. Known as the mineral of "3,000 uses," asbestos is an extremely dangerous material. These dangers and ways to prevent injury are displayed very well with "top notch" graphics and photos. Useful to any audience, especially those involved in insulation or in the repair of brake shoes.

Audiences: General audience, maintenance workers and mechanics, and construction workers.

Overall Ratings: T2 Manager — Excellent

70 Air Brakes — What You Should Know

Leighton and Kidd, 1986
45 minutes (Copyrighted)

This entertaining yet detailed tape covers the fundamentals of air brakes. Even though the example vehicle is an 18-wheeler, the principles, operation, and components are similar for other heavy equipment and also smaller trucks. Excellent graphics and narration are given for why we use air brakes, the basic air brake system — controls and components, and proper pretrip inspections. Parking and emergency brakes are also discussed.

Audiences: Mechanics and vehicle operators.

Overall Ratings: T2 Manager — Excellent; Participants — Good

71 First On the Scene — Hazardous Material Safety

Chemical Manufacturers Association
31 minutes

The tape is for “first responders” to hazardous materials incidents. It is designed to help the first responders survive, avoid injury, and obtain assistance. Five key points are stressed: (1) how to approach the scene, (2) how to identify the material, (3) how to stabilize the incident scene, (4) where to obtain help to handle the problem, and (5) site entry. Demonstrative examples vividly portray how one should respond to various types of hazardous accidents.

Audiences: General maintenance workers, police and firemen, road superintendents.

Overall Ratings: T2 Manager — Excellent

72 Snow Removal on Iowa’s Secondary Roads

Iowa DOT
26 minutes

Even though specifically developed for maintenance people in Iowa, the principles and practical techniques noted in this tape are applicable to any area that has snow removal. Checklists are given for preparation for the winter snow removal season. This includes checking all equipment and materials early in the fall, developing coordination with police and others, and defining procedures and priorities for snow removal.

Audiences: Public works directors, city engineers, and road superintendents.

Overall Ratings: T2 Manager — Good

73 Asphalt Recycling in Minnesota

Minnesota DOT
23 minutes

This fast moving, entertaining tape promotes the use of recycled asphalt pavements. Advantages which are highlighted are savings in materials, energy, and money. Even though reference is made to Minnesota DOT specifications, the procedures and techniques for recycling are rather uniform throughout the country. Parameters to help the decision maker decide upon recycling as a viable option includes: (1) wear and weathering, (2) friction, (3) uniformity, (4) thermal cracking, (5) structural condition, (6) ride quality, and (7) strength of the pavement. Minnesota DOT examples show cost savings of 38 to 67 percent by recycling.

Audiences: Public works directors, city engineers, road superintendents, and engineering staff.

Overall Ratings: T2 Manager — Good

74 Flagging Procedures and Operations

Minnesota DOT, 1986
15 minutes

A brief but thorough tape, the procedures for various flagging operations are highlighted by actual examples. Covered are (1) advance flagging, (2) single-flagger operation, (3) two-flagger operation, (4) nighttime flagging, (5) one flagger/one direction, and (6) flagging for emergency situations. Reference is made to Minnesota DOT manuals and flagging handbooks, however, the principles are the same for any state or local jurisdiction.

Audiences: Flaggers and road supervisors.

Overall Ratings: T2 Manager — Excellent

75 Tort Liability (What Can Be Done to Minimize It)

Minnesota DOT
18 minutes

The tape is the third tape of a series by Minnesota DOT. The first two tapes dealt with specific laws in the state of Minnesota. This tape explains, in general terms, what one can do to minimize their exposure to tort claims. Even though reference is made by the speaker to Minnesota DOT, the principles and procedures are applicable to any transportation agency. Checklists help to provide a rational procedure for dealing with this subject.

Audiences: All transportation agencies' staff and managers.

Overall Ratings: T2 Manager — Good

76 Maintaining Granular Surfaced Roads

Iowa DOT
18 minutes

This is a very thorough tape on the subject. Beginning with the basics of defining crown, shoulders, superelevation and others, the tape progresses into recommended operating techniques. Maintaining granular roads involves maintaining the surface only or scarifying and remixing the total wearing course. Equipment set up procedures are defined as well as special considerations needed for intersections, railroad crossings, driveways, bridges, hilltops, sags, and superelevated curves.

Audiences: Road superintendents, grader operators.

Overall Ratings: T2 Manager — Excellent

77 Cold Process Asphalt Renovation and Base Stabilization

E/S Allison, Associates
17 minutes

This short tape takes one through the actual steps for doing inexpensive cold recycling of low-volume roads. Subtle humor makes the tape interesting and entertaining. Filmed in Ocean Shores, Washington, cold process renovation (CPR) provided a viable alternative to a leveling course and overlay. Five basic steps are defined and photographically shown: (1) pulverization, (2) mixing, (3) shaping and compacting, (4) fog sealing, and (5) wearing surface (chip seal).

Audiences: Road superintendents, public works directors, and maintenance workers.

Overall Ratings: T2 Manager — Excellent

78 The Flagger

Washington State Department of Transportation
43 minutes

An entertaining and detailed tape defining the importance of proper flagging techniques for roadway traffic. Tape was produced as part of the state's flagging certification process which includes training. Discussed are characteristics of a good flagger, equipment and clothing, advanced signage, flagging procedures (day and night), and specific examples of on-site conditions. The tape is new (1986) and is up to date.

Audiences: Flaggers.

Overall Ratings: T2 Manager — Good

79 Drainage Pipe Placement

Pennsylvania DOT
17 minutes

Bob Kelley of Pennsylvania DOT's training office takes one through the proper procedures for drainage pipe installation. The example in the tape is of an actual replacement of a drainage pipe on a county road. Good use is made of photographs and graphs. Especially important is the proper compaction of soil which is emphasized by using a physical model. Important is planning ahead for the work, doing it right, and public relations with adjacent property owners.

Audiences: Road superintendents and maintenance crews.

Overall Ratings: T2 Manager — Good

80 Planning and Organizing for Winter Maintenance

Pennsylvania DOT Department of Training
12 minutes

Bob Kelly of Pennsylvania DOT's training office emphasizes the importance of planning ahead and planning correctly for the winter season. In the tape, assessment of the various winter operations is made in the spring, routine maintenance of signs and equipment, especially drainage, is emphasized in the summer, and stockpiles, manpower assignments, and equipment is made ready in the fall. The short tape tells in a few words the key items to consider during the year to be ready for that first heavy snow.

Audiences: Road superintendents, county engineers, and their assistants.

Overall Ratings: T2 Manager — Good

81 Maintaining Low-Volume Roads

Pennsylvania DOT
12 minutes

This interesting tape covers maintenance strategies for the three types of low-volume roads in Pennsylvania. The road types are unimproved, stabilized, and improved (BST type paving). Extremely basic presentation, the tape provides a good reminder of differences and similarities of maintenance activities on the roads. Grading techniques are vividly portrayed.

Audiences: Road superintendents and maintenance workers.

Overall Ratings: T2 Manager — Good

82 Guidelines for Spring Highway Use Restrictions

Washington State Department of Transportation, NWT2 Center
32 minutes

The tape explains “frost heave” in basic terms. A technical method is given that can be used to estimate when and how much load restrictions should be applied due to spring thaws. The methods developed are the results of a study by the Washington State Transportation Center at the University of Washington for WSDOT and FHWA. A separate pamphlet to supplement the tape has also been published. Expect rather detailed technical material.

Audiences: Public works directors and road superintendents.

Overall Ratings: T2 Manager — Good

83 Epoxy Coated Reinforcing Bars — Handling, Storage, and Placement

Concrete Reinforcing Steel Institute (CRSI)
26 minutes (Copyrighted)

This 1987 tape highlights the importance of epoxy coated rebars and their proper handling, storage, and placement. A brief handout is referred to which photographically shows examples of defects in the epoxy coating and which types of rebars require repair before acceptance per standard specifications.

Audiences: Construction inspectors, iron workers, and project engineers.

Overall Ratings: T2 Manager — Good

84 Snowplows and Spreader Operation

Nebraska Department of Roads
50 minutes

This tape covers three parts: (1) equipment and hookup, (2) daily checks, and (3) plowing and spreading techniques. Part I explains the basic parts of the equipment and power techniques for hookup and adjustments. Part 2, daily checks, covers daily maintenance of trucks, plows, spreaders, and other preparations needed prior to snowplowing. Part 3 explains plowing and spreading techniques on the road and how they differ from normal driving conditions. Length of time of various parts are: part 1, 17 minutes; part 2, 13 minutes; and part 3, 20 minutes.

This tape has been updated to cover the use of hydraulically controlled plows and the vee box spreader in Tape 232.

Audiences: Snowplow operators.

Overall Ratings: T2 Manager — Good

85 Preventive Maintenance Overview and Dump Truck Operation

Nebraska Department of Road
51 minutes

This tape is really two separate and yet related subjects. Preventive maintenance (PM) overview stresses the importance of PM before starting a trip. A passenger car is used as an example. Time — 14 minutes.

Dump truck operation has two parts. Part 1 covers pretrip inspection, startup procedures, and transmissions. Part 2 covers basic maneuvering, dump box operation, and shutdown. Tape time is 37 minutes.

Audiences: Dump truck operators.

Overall Ratings: T2 Manager — Good

86 Mowers

Nebraska Department of Roads
30 minutes

Interesting two-part tape on mowers. Part 1 covers pretrip inspection, and part 2 covers basic operations.

Audiences: Mower operators.

Overall Ratings: T2 Manager — Good

87 Prestressed Concrete Bridge Inspection

Pennsylvania DOT
60 minutes

This tape is a combination of lecture and field observations. Explains the whys of inspection, planning the on-site visit, and the actual inspections of prestressed concrete bridges. Reference is made to Pennsylvania's specifications and standards, however, the procedures and principles are applicable to any state or local agency. Technical material is presented well and should be understood easily by engineers, superintendents, and bridge inspectors.

Audiences: Bridge inspectors.

Overall Ratings: T2 Manager — Good

88 Use of Fabrics on Oklahoma Aggregate Surface Roads

Oklahoma T2 Center
25 minutes

This short tape is narrated by John Hopkins, manager of the Oklahoma T2 Center. John's humor makes a rather dry subject interesting and enlightening. Numerous examples are shown of using fabrics on gravel roads and in creating a haul road for an extremely heavy piece of equipment. Longevity of granular roads are increased considerably with the use of fabrics.

Audiences: Engineers and road superintendents.

Overall Ratings: T2 Manager — Good

89 Recycling Roads With Asphalt Emulsions

Asphalt Institute (produced by Iowa State University)
22 minutes (Copyrighted)

This tape dramatically shows the advantages of cold mix recycling by using asphalt emulsions. Numerous examples are given of the processes used on low-volume roads and residential streets. Reference is made to the Asphalt Institute's publications (1) Basic Asphalt Emulsion manual and (2) Asphalt Cold Mix Manual. Recycling roads with asphalt emulsions is effective, economical, energy efficient, and environmentally safe. An excellent tape with good practical examples.

Audiences: Engineers, road superintendents, and maintenance workers.

Overall Ratings: T2 Manager — Excellent

90 First Annual Truck and Loader Rodeo (1987)

Washington Association of County Road Supervisors
30 minutes

This tape was prepared by Yakima County to highlight the first truck and loader rodeo by the Eastern and Western Association of County Road Supervisors. Competition included traversing a set obstacle course for 5-yard dump trucks with snowplow, 10-yard dump trucks with a snowplow, and rubber-tired loaders. The first 18 minutes of the tape show actual competition on the site with the last 12 minutes for presentations at the annual EWACRS/WWACRS meeting.

Audiences: Public works, superintendents, and equipment operators, and the general public.

Overall Ratings: T2 Manager — Good

91 Dead Wrong

Pennsylvania DOT
28 minutes

Program reviews the cause of traffic deaths and accidents. Victims relate details of the situations involved in their accidents.

Audiences: All employees.

Overall Ratings: T2 Manager — Excellent

92 Cathodic Protection for Bridges

Montana State University
11 minutes (Copyrighted)

This brief tape very rapidly explains the reasons for cathodic protection and provides an example of a protected bridge near Bozeman, Montana. Basic principles of cathodic protection are explained and diagrammed. Treatments are good for an estimated 40 years, and previous studies show that corrosion of reinforcing steel can be stopped or reduced considerably.

Audiences: Engineers and road superintendents.

Overall Ratings: T2 Manager — Fair

93 Winter Services

Pennsylvania DOT
22 minutes

Two-part program. Part 1 identifies three levels of service to be provided to Pennsylvania state highways. Part 2 discusses deicing material applications and plow procedures associated with levels of service identified in part 1.

Audiences: Public works directors, city engineers, road superintendents, and snowplow operators.

Overall Ratings: T2 Manager — Good

94 Backing — You Owe It to Yourself

Pennsylvania DOT
10 minutes

The tape outlines proper procedures for equipment backing to reduce backing accidents.

Audiences: Equipment operators and foreman.

Overall Ratings: T2 Manager — Good

95 Bituminous Surface Treatment

Pennsylvania State Department of Transportation
18 minutes

This tape presents the differences between bituminous seal coats and bituminous surface treatment which is two applications of both bituminous material and aggregate. It also addresses use of precoating of the final aggregate used in the second application. References are made to Pennsylvania DOT's standard specifications, however, ideas presented are generally applicable anywhere.

Audiences: Public works director, road superintendents, and construction workers.

Overall Ratings: T2 Manager — Excellent

96 Hazardous Materials in Transit

Connecticut State Department of Transportation
35 minutes

This presentation, a narrated slide program is very basic. The tape identifies various types of commonly shipped materials (classified as hazardous), their classifications and characteristics, and identifies some of the types of containers used for shipment. The tape explains when placards are required and the fact that multiple hazards may exist in addition to the one displayed. The tape was prepared specifically for road maintenance crews and defines precautions to be taken prior to undertaking cleanup of hazardous spills.

Audiences: General maintenance workers.

Overall Ratings: T2 Manager — Fair

97 Risk Management

Pennsylvania State Department of Transportation
21 minutes

Narrative is given of the very basic of terms and procedures to reduce the amount of tort litigation. To avoid tort claims, key actions are to inspect, anticipate/predict, and provide conformity. A RISK is also emphasized as a term to remember to reduce torts:

A — Action
R — Respond and Record
I — Investigate and Inquire
S — Seek Advice
K — Keep Records

Audiences: All public works employees.

Overall Ratings: T2 Manager — Excellent

98 Blading Unpaved Roads

FHWA and NACE
22 minutes

This tape is similar to No. 76. The basic fundamentals of blading unpaved roads is covered. Reference is made to NACE's publication, Blading, Aggregate Surfaces. After pre-operation checks are made, various operational techniques are shown including special techniques for intersections, railroad crossings, driveways, and bridge approaches.

Audiences: Grade operators.

Overall Ratings: T2 Manager — Excellent

99 Slurry Seals

J-Pat, Inc.
15 minutes

This 1988 video tape was developed by J-Pat, Inc. at the request of your T2 Center. The advantage of using slurry seals is documented with excellent graphics and photos. Slurry seals are used throughout the world since development of efficient equipment in the 1960s. The key to a good slurry seal is proper aggregate grading. Multicourse applications can also be used. Highlighted are some disadvantages with other treatments including chip and seal coats, cold or hot mix patching, crack filling and their hot mix overlays. According to the authors, slurry seals are applicable for roads, streets, parking lots, airport runways, and other uses. Advantages of slurry seals are vividly shown.

Audiences: All public works employees dealing with road maintenance or rehabilitation.

Overall Ratings: T2 Manager — Excellent

100 Lime — The Versatile Stabilizer in Construction

National Lime Association
26 minutes (Copyrighted)

As shown on the tape, lime has been used as a stabilization agent since Roman times. Numerous examples are given of using lime for strengthening soils for highways, airport runways, levies, slide areas, railroad beds, and others. Brief definitions are given as well as various construction procedures. Low volume roads stabilization may be of particular interest to cities and counties.

Audiences: Public works directors, engineers, and road superintendents.

Overall Ratings: T2 Manager — Excellent

101 Better Inductive Loop Detectors

FHWA and New York State Department of Transportation
16 minutes

A general tape on vehicle detectors explaining the use of inductive loops. Basic concepts are explained on how an inductive loop operates and why failures occur. Newer installation techniques are illustrated.

Audiences: Traffic engineers and inductive loop installers.

Overall Ratings: T2 Manager — Good

102 Caution, Litigation Ahead — The Road to Effective Risk Management

FHWA
25 minutes

This tape's purpose is to motivate state and local agencies to implement effective risk management programs in order to improve highway, roads, or street safety and to mitigate the risks of tort liability.

Various Speakers throughout the country emphasize by examples, the growing costs to transportation agencies occurring by tort claims. As stated by the host narrator: "An ounce of prevention is worth a ton of litigations." The tape focus is on a coordinated risk management approach involving those members of a public agency that are directly involved with design, maintenance, instruction, policing, and reporting of the agency's road network.

A risk management program in place puts the local or state agency in a better position to deal with tort litigation from traffic accidents and injuries.

A resource list of courses and reference books is available to persons reviewing the tape (contact the center or ask your trainer).

Audiences: All public works employees.

Overall Ratings: T2 Manager — Excellent

103 Build Better and Save With Modern Timber Bridges

FHWA (RTAP) and USDA (USFS), April 1988
22 minutes

This tape emphasizes the practical use of timber for bridges. An illustrated example of a stressed timber bridge is shown from design and fabrication to installation of the prefabricated units on a typical stream crossing of a township road.

Audiences: Public works directors, designers, and superintendents.

Overall Ratings: T2 Manager — Excellent

104 Truck Impacts on Pavements

FHWA, April 1988
24 minutes

This tape places emphasis on the effects of truck axle loading on pavement life and the importance of having proper load distribution with reduced axle loading to maximize pavement life. Gross vehicle weight could be increased if axle load were reduced, resulting in increased profits for the trucking industry while reducing the damage to pavement by $250 million annually.

Audiences: Highway administrators and engineers.

Overall Ratings: T2 Trainer — Excellent

105 Chain Saw Safety

Stihl
27 minutes (Copyrighted)

A combination of three videos dealing with the safe operation of chain saws. It includes proper operating techniques for small saws up through professional operating techniques in large timber. One segment deals exclusively with kickback which is the most hazardous aspect of power saw operation.

Audiences: Superintendents, foremen, and maintenance workers.

Overall Ratings: T2 Trainer — Excellent

106 Caution at Work

Stihl
5½ minutes (Copyrighted)

This tape shows the safe operating procedures for hand held trimmers, brush cutters, and blowers.

Audiences: Superintendents, foremen, and maintenance workers.

Overall Ratings: T2 Trainer — Good

107 Pothole Patcher

Delaware State Department of Transportation
23 minutes

This is a two-part tape that describes the Thermo Lay Pothole Patcher. The first part covers the major components and inspection. Part 11 covers preheating, collecting asphalt mix, making road repairs, cleaning, and shutdown.

Audiences: Foremen and maintenance workers.

Overall Ratings: T2 Trainer — Good

108 Single Wing Flail Mower

Delaware State Department of Transportation
18 minutes

The pretrip inspection, operation, and shutdown of a single wing flail mower are shown.

Audiences: Mower operators.

Overall Ratings: T2 Trainer — Good

109 Brush Cutter

Delaware State Department of Transportation
13 minutes

This video shows the pretrip inspection, operation, and shutdown of a boom mounted rotary blade brush cutter.

Audiences: Brush cutter operators and maintenance workers.

Overall Ratings: T2 Trainer — Excellent

110 Plow Power

Northeast Chapter APWA
15 minutes (Copyrighted)

This tape, filmed in New England, shows plowing techniques for city streets and cul-de-sacs. It shows pickup mounted plows as well as truck mounted and also covers the use of wing plows in city snow removal operations.

Audiences: City street maintenance crews.

Overall Ratings: T2 Trainer — Good

111 Working With Pesticides, Vol. 1: (Ask the Experts)

The Idea Bank
46 minutes (Copyrighted)

General questions from pesticide users throughout the country are asked of four experts. Questions and answers are provided on safety precautions, other reference materials, equipment care, emergency responses, clothing, proper climate conditions, and storage of materials.

Audiences: Users of pesticides.

Overall Ratings: T2 Manager — Good

112 Use of Pesticides, Volume 2

The Idea Bank
41 minutes (Copyrighted)

This tape includes four subparts of: In-field equipment operation and maintenance, pesticide labeling, pesticide storage, and containers disposal and handling spills.

Audiences: Users of pesticides.

Overall Ratings: T2 Manager — Good

113 Inlay Patching Using a Small Cold Planer

Oregon State Department of Transportation — Highway Division
16 minutes

Maury Payne, District Maintenance Supervisor, narrates this tape which describes equipment, materials, and procedures for correcting smaller existing pavement defects with a small cold planer. According to Mr. Payne, this technique has produced good results in the Portland area for over ten years. Hot ACP patch is the final product.

Audiences: Maintenance personnel.

Overall Ratings: T2 Manager — Very Good

114 Inlay Patching Using a Large Cold Planer

Oregon State Department of Transportation — Highway Division
16 minutes

This tape is similar to No. 113, however, the emphasis is on correcting larger problems in pavements. For example, a full lane patch. The equipment, materials, and procedures are well defined by Maury Payne, the District Maintenance Supervisor. The technique has been used in the Portland area for over ten years and has produced good results.

Audiences: Maintenance personnel.

Overall Ratings: T2 Manager — Very Good

115 Hardwood Anyone?

Pennsylvania State Department of Transportation, Penn T2 Center, et. al
10 minutes

This 1988 tape highlights the many uses of hardwoods. A brief history of hardwood use is followed by examples of its present day use for buildings, bridges, and other. A public relations type tape, it promotes the use of the raw materials available in the northeast.

Audiences: General.

Overall Ratings: T2 Manager — Good

116 Daily Maintenance of Asphalt Distributors

International Road Federation
16 minutes (Copyrighted)

The video shows the four preventive maintenance checks: prestart, warm-up, operating, and shutdown for distributors, as well as cleanup procedures. (**Basic**)

Audiences: Beginning operators.

Overall Ratings: T2 Trainer — Good

117 Mechanical Cleaning of Unlined Ditches

International Road Federation
20 minutes (Copyrighted)

This provides a review of the ditch form, its function, and the operating methods for cleaning the ditch by grader and backhoe.

Audiences: Road superintendents, foremen, and maintenance workers.

Overall Ratings: T2 Trainer — Good

118 Common Maintenance Problems and Causes

International Road Federation
20 minutes (Copyrighted)

The common problems and causes for seven maintenance areas are identified. These areas are: asphalt pavement, Portland Cement Concrete pavement, earth and gravel roads, road shoulders, drainage facilities, bridges, and roadside areas.

Audiences: Foremen and maintenance workers.

Overall Ratings: T2 Trainer — Good

119 Concrete Bridge Deck Repair

International Road Federation
17 minutes (Copyrighted)

Tape covers permanent repair of partial and full depth bridge deck holes with cement concrete.

Audiences: Road superintendents, foremen, and maintenance workers.

Overall Ratings: T2 Trainer — Good

120 Daily Maintenance of Crawler Tractors

International Road Federation
20 minutes (Copyrighted)

The program shows the four preventive maintenance checks for crawler tractors: prestart, warm-up, operating, and shutdown. (**Basic**)

Audiences: Beginning operators.

Overall Ratings: T2 Trainer — Good

121 Daily Maintenance of Dump Trucks

International Road Federation
19 minutes (Copyrighted)

The tape covers the four preventive maintenance checks for dump trucks: prestart, warm-up, operating, and shutdown. (**Basic**)

Audiences: Beginning operators.

Overall Ratings: T2 Trainer — Good

122 Daily Maintenance of Front-End Loaders

International Road Federation
18 minutes (Copyrighted)

Covered are the four preventive maintenance checks for front-end loaders: prestart, warm-up, operating, and shutdown. (**Basic**)

Audiences: Beginning operators.

Overall Ratings: T2 Trainer — Good

123 Daily Maintenance of Motor Graders

International Road Federation
21 minutes (Copyrighted)

Covered are the four preventive maintenance checks for motor graders: prestart, warm-up, operating, and shutdown. (**Basic**)

Audiences: Beginning operators.

Overall Ratings: T2 Trainer — Good

124 Cleaning and Clearing of Bridges

International Road Federation
13 minutes (Copyrighted)

This tape describes the basics of what, why, and how of cleaning bridges and their components. Covered are drain holes, drain spouts, expansion joints, bearing assemblies, pier caps and abutments, and removing debris, and waterway obstructions. (**Basic**)

Audiences: Road superintendents, foremen, and maintenance workers.

Overall Ratings: T2 Trainer — Good

125 Cleaning of Lined Ditches, Culverts, and Catch Basins

International Road Federation
15 minutes (Copyrighted)

Demonstrated in this video tape are the proper procedures for **manual cleaning** of lined ditches, culverts, and catch basins. (**Basic**)

Audiences: Beginning maintenance workers. Basic hand operations.

Overall Ratings: T2 Trainer — Good

126 Daily Maintenance of Rollers

International Road Federation
21 minutes (Copyrighted)

This video shows the four preventive maintenance checks for rollers: prestart, warm-up, operating, and shutdown. Steel wheel, pneumatic, and vibratory rollers are described. (**Basic**)

Audiences: Beginning operators.

Overall Ratings: T2 Trainer — Good

127 Erosion and Sedimentation Control for Highway Construction

Pennsylvania State Department of Transportation
15 minutes (1985)

This quick moving tape shows the importance of proper erosion and sedimentation control. A brief portion of the tape refers to Pennsylvania procedures and laws but other states have similar ones. Various techniques and examples are shown of resolving erosion and sedimentation problems which are applicable for all public agencies.

Audiences: Road and street supervisors and engineers.

Overall Ratings: T2 Manager — Very Good

128 Say it for Safety

Pennsylvania State Department of Transportation
24 minutes

A general tape showing “tricks of the trade” of experienced equipment operators. Various types of common equipment are shown and safety items discussed by each “old hand.”

Audiences: Equipment operators, especially newer ones.

Overall Ratings: T2 Manager — Very Good

129 Bridge Maintenance Systems (1987)

Pennsylvania State Department of Transportation
33 minutes

This tape explains the background, development, and use of the Pennsylvania DOT’s 1986 new Bridge Maintenance System. The magnitude of the bridge problem in Pennsylvania is noted — they have 25,400 state and 28,400 local bridges. The new system provides for each bridge: (l) characteristics and conditions, (2) load and width restrictions, (3) needed improvements, and (4) a cost/benefit analysis. This tape explains the proper use of the Bridge Maintenance forms.

Audiences: State DOTs and county engineers.

Overall Ratings: T2 Manager — Very Good

130 Erosion Control Material Installation — 1985 Demo

Pennsylvania State Department of Transportation
30 minutes (no sound)

This tape shows the installation of an erosion fabric in a major drainage ditch in Pennsylvania. After lay down and staking of the fabric, the water is allowed entry. No additional coverage was provided on the fabric.

Audiences: General construction and maintenance people.

Overall Ratings: T2 Manager — Fair (could speed up the tape and get same amount of information)

131 Concrete Filled Steel Grid Bridge Decks

Pennsylvania State Department of Transportation
90 minutes

This video is the taping of a portion of a workshop in Pennsylvania. Reinforced concrete bridge decks, "exodermic" bridge decks are explained and examples given of their use. Presenters are from the Bridge Deck Flooring Manufacturer's Association. Steel grid type of bridge decks have been around for 50 to 60 years and have proven their worth. New technology of the 1980s has improved the various types even more. Advantages noted include cost savings, prefabrication, lightweight, ease of assembly, and maintainability of traffic. Expect rather poor video of slide of graphs and a rather long tape.

Audiences: Bridge designers.

Overall Ratings: T2 Manager — Good technical; Fair — Poor visual quality

132 New Directives in Sign Management

ATSSA
16 minutes (Copyrighted)

The quality of existing signage and what an agency can do about it is explained. Bloomington, Indiana is an example agency that has done much to improve its signs. A program of action is important and explained. Most of the material is nontechnical and presented in layman's language.

Audiences: General public, public mayors, commissioners, and public works officials.

Overall Ratings: T2 Manager — Excellent

133 Nighttime Traffic Control in Work Zones

ATSSA
18 minutes (Copyrighted)

Work zone traffic control during daylight is critical, however, at night these areas can become a motorist's nightmare. This brief tape emphasizes the importance of designing and maintaining work zone traffic control for night conditions. At night, many elements restrict the ability of drivers to properly see and recognize what is expected of them. The authors stress that the MUTCD is for "average conditions" whereas nighttime driving is not "average."

Audiences: Public works directors, road and street superintendents, traffic engineers, and nighttime workers.

Overall Ratings: T2 Manager — Very Good

134 Surface Placement

Washington State Department of Transportation
18 minutes

This tape covers the application of aggregate base courses. Importance of aggregate inspection and testing, proper gradation, mixing, and field application is viewed via the eyes of a WSDOT inspector. Procedures and specifications of WSDOT are referenced throughout as this tape was developed as a training tool for WSDOT inspectors. The tape is useful to any inspector or maintenance foremen as basic principles are covered.

Audiences: Inspectors, maintenance, and construction highway projects.

Overall Ratings: T2 Manager — Good

135 Bituminous Surface Treatment

Washington State Department of Transportation, 1988
24 minutes

The video by the Construction Office of WSDOT's Highway Division was created as a training tool for WSDOT's inspectors of BST projects. Even though reference is made to WSDOT's specifications and standards, the basic principles of doing a good BST job are well explained.

Audiences: Road and street superintendents and inspectors.

Overall Ratings: T2 Manager — Very Good

136 Traffic Control for Maintenance Work Areas

Utah State Department of Transportation
40 minutes

This video includes four distinct parts: (l) elements of traffic control in work areas, (2) traffic control devices and equipment, (3) procedures for signing and channelization devices, and (4) special traffic control requirements for nighttime work areas. The tape provides examples of various situations on streets, rural roads, and also freeways.

Audiences: Road superintendents and project engineers.

Overall Ratings: T2 Manager — Good

137 Implementing a Maintenance Management System (MMS)

FHWA
35 minutes

The tape was used as part of the RTAP Workshop, Maintenance Management Systems workshops. Various portions of the tape was used to introduce the various chapters of a manual that was part of the workshop. The tape could be used as an informational tool for MMS without the workshop manual provided the viewers realize that the tape provides just an overview on the subject.

Audiences: Road superintendents, project engineers, and public works directors.

Overall Ratings: T2 Manager — Good

138 Implementing an Equipment Management System (EMS)

FHWA
40 minutes

As with tape No. 137, MMS, this tape was used as part of the RTAP workshop of the same title. A manual was used in the workshop but the tape can be used to provide an overview of the subject.

Audiences: Equipment maintenance supervisors and public works directors.

Overall Ratings: T2 Manager — Good

139 Uses of Asphalt Rubber

FHWA/NHI/RTAP
12 minutes

Asphalt rubber from scrap tires is used for many products. The Asphalt Rubber Producers Group shows examples of asphalt rubber use in asphalt rubber concrete, open graded mixes, stress and/or waterproof membranes, slurry and cap seals, including chip seals.

Audiences: Maintenance personnel.

Overall Ratings: T2 Manager — Good

140 Emergency Relief

FHWA
17 minutes

Video explains the Emergency Relief (ER) Program for federal aid highways. Tape explains how the ER program works and lists specific criteria a project must satisfy. Examples of various disasters throughout the country vividly portray the use of ER program's funding.

Audiences: Public works officials (administrators, public works directors, etc.).

Overall Ratings: T2 Manager — Very Good

141 Road Jurisdiction Study

Legislative Transportation Committee (LTC), 1988
13 minutes

This video provides an overview of the Washington Legislative Study authorized in 1983 to define the needs of improvements on Washington highways, road, and streets. Highlights include problem areas of deterioration, congestions, mobility, and road users costs.

Audiences: General public.

Overall Ratings: T2 Manager — Very Good

142 Paving the Way for Tomorrow's Highways

SHRP
16 minutes

The video presents the Strategic Highway Research Program (SHRP). This 5-year, $150 million program is financed with 1/4 of 1 percent of the state apportionments of federal aid highway funds. Areas of SHRP include: asphalt, pavement performance, highway operations, and concrete structures. Individual projects are defined.

Audiences: Public works officials including management and research personnel.

Overall Ratings: T2 Manager — Very Good

143 Maintaining Gravel Roads in Arkansas

Arkansas T2 Center, University of Arkansas, et. al.
29 minutes

Tape presents the basics of gravel road design, material specifications, and construction. Two maintenance operations of existing roads, smoothing, and reshaping are explained in detail.

Audiences: Road and street superintendents and grader operators.

Overall Ratings: T2 Manager — Excellent

144 The Idea Store — Editions 1 and 2

Pennsylvania T2 Center, 1989
8 minutes and 13 minutes

Various ideas are presented that have been sent to Pennsylvania T2 Center from throughout the country.

Edition 1 includes ideas on: leveling roads, special hand level, snow plow blade storage, sign identification decal, standard plans for park benches, and other street furniture.

Edition 2 includes ideas on: identifying (marking) construction signs, fire hose cone hold down, traffic control guidebooks, motor grader blade changing, measuring aggregate lost, "innovative tools" from Iowa, and a public relations flyer on snow removal.

Audiences: General maintenance personnel.

Overall Ratings: T2 Manager — Fair

145 Pile Cap Replacement

Oregon T2 Center, ODOT, FHWA
13 minutes

Replacement of timber pile caps can be quickly accomplished using the techniques demonstrated in this tape. The Whiteson Bridge is similar to many rural local bridges with timber piles and pile caps. Even under existing traffic, repair work can proceed.

Audiences: Road and street foremen, public works directors, and bridge repair crews.

Overall Ratings: T2 Manager — Very Good

146 The Safer Roadside

Washington State Department of Transportation, 1989
16 minutes

This brief video provides an overview of WSDOT's effects since the 1960s in making the roadsides of state highways safer and concludes with the process of utility pole accommodations. Tape refers to WSDOT's clear zone criteria which is based upon AASHTO. Materials are presented in a nontechnical manner.

Audiences: General, public works employees.

Overall Ratings: T2 Manager — Very Good

147 Mailboxes May Be Hazardous to Your Health

Texas Department of Highways and FHWA
14 minutes

Many people are killed or seriously injured each year in collisions involving mailboxes. The number of nonyielding mailbox structures has been observed to be increasing each year. This tape highlights the severity of vehicle collisions with unsafe mailboxes and shows examples of both safe and hazardous mailbox supports.

Audiences: Postal officials, local highway officials, community groups, maintenance crews.

Overall Ratings: T2 Manager — Good

148 Ramp Metering: Signal for Success

FHWA
17 minutes

This video, oriented to both the informal layman and the public official, explains the principles and benefits of ramp metering. Viewers are encouraged to further explore the potential for ramp metering in their own communities. Applicable for cities with freeways.

Audiences: Public officials of larger urban areas.

Overall Ratings: T2 Manager — Good

149 Maintenance of Gravel Roads

North Carolina Institute for Transportation Research and FHWA, 1989
27 minutes

The video shows proper procedures for smoothing and reshaping gravel roads. Grading techniques are shown for intersections, railroad crossings, driveways, bridges, hilltops and valleys, and superelevation in curves.

Audiences: Road and street foremen and grader operators.

Overall Ratings: T2 Trainer — Very Good

150 Ditch Maintenance

North Carolina Institute for Transportation Research and FHWA, 1989
17 minutes

This tape emphasizes the need for proper drainage. It shows the goals for ditch maintenance, the proper procedures for performing the maintenance by using a motor grader and an excavator.

Audiences: Road and street foremen, equipment operators, and maintenance workers.

Overall Ratings: T2 Trainer — Excellent

151 Pothole Patching

North Carolina Institute for Transportation Research and FHWA, 1989
17 minutes

Proper procedures of repairing potholes are illustrated. The tape identifies causes of potholes, equipment needed, and six steps for proper repair.

Audiences: Road and street foremen and maintenance crew.

Overall Ratings: T2 Trainer — Excellent

152 Crack Sealing

North Carolina Institute for Transportation Research and FHWA, 1989
16 minutes

This tape illustrates clear, simple, and effective crack sealing procedures for small maintenance crews. The four steps are: crack analysis and identification, crack cleaning and preparation, application of sealant, and squeegee of cracks.

Audiences: Road and street foremen and maintenance crew.

Overall Ratings: T2 Trainer — Excellent

153 Basic Traffic Control

North Carolina Institute for Transportation Research and FHWA, 1989
11 minutes

This tape covers the basic traffic control procedures for stationary and moving operations. It covers the placement of warning signs and the use of flaggers.

Audiences: Road and street foremen and maintenance crews.

Overall Ratings: T2 Trainer — Good

154 Shoulder Maintenance

North Carolina Institute for Transportation Research and FHWA, 1989
22 minutes

Three types of shoulder maintenance are illustrated: reshaping, low shoulder, and high shoulder repairs.

Audiences: Road and street foremen, grader operators, and maintenance crews.

Overall Ratings: T2 Trainer — Good

155 Asphalt Chip Seals

North Carolina Institute for Transportation Research and FHWA, 1989
22 minutes

An asphalt chip seal procedure is illustrated. The seven steps shown include: examine existing pavement, repair pavement, clean surface, apply asphalt, spread aggregate, roll aggregate, and remove excess aggregate.

Audiences: Road and street foremen and maintenance crews.

Overall Ratings: T2 Trainer — Very Good

156 The Business of Backhoe Loader Operation

John Deere Television Communications
19 minutes (Copyrighted)

This older tape shows the method of operation of backhoe loaders by several contractors and a municipality which have shown to increase productivity. It includes utility cuts, excavation for structures, and use of extendable dippersticks.

Audiences: Equipment operators.

Overall Ratings: T2 Trainer — Good

157 Compressed Gases: The Correct Way to Use Acetylene and Oxygen for Cutting

Pennsylvania Bureau of Deep Mines; National Mine Health and Safety Academy
42 minutes

This tape was prepared for use in mining safety but is applicable by anyone who uses a cutting torch. The instructor cites numerous accidents that have resulted from inattention to following the basic steps.

Audiences: Shop personnel and others who occasionally may use a cutting torch.

Overall Ratings: T2 Trainer — Good

158 Loader/Backhoe Safety Operation

Case Backhoe
45 minutes (Copyrighted)

The first portion of the tape covers the daily checks and startup operation and preventive maintenance required and operating procedures for safe operation of a backhoe loader. The second portion covers additional maintenance procedures required at periodic intervals including checking tension on certain bolts and jump starting. The latter portion is promotional material for J. I. Case and does not have any training value.

Audiences: Foremen and equipment operators.

Overall Ratings: T2 Trainer — Very Good (for first two portions)

159 The Rural Transportation Assistant Program (RTAP)

National Highway Institute
12 minutes

This tape explains the benefits that an agency can receive from the Technology Transfer Program. Examples are given of assistance received by agencies from various activities of individual centers. Note, the Northwest Technology Transfer Center is part of RTAP.

Audiences: Agency management and supervisors.

Overall Ratings: T2 Trainer — Very Good

160 Steel Wheel Roller Operation

Utah DOT
22 minutes

This tape explains the operation of a 4- to 6-ton towable steel roller. It covers the daily check, preventive maintenance, startup procedures, hookup and towing, basic operating techniques, rolling techniques, and shut down.

Audiences: Road maintenance workers.

Overall Ratings: T2 Trainer — subject matter Very Good, picture quality Fair

161 Operation and Maintenance of Air Compressors

Utah DOT
9 minutes

The subject of this tape is the operation and maintenance of a trailer-mounted air compressor including daily checks, startup, hooking up tools, use of the wand, and shutdown.

Audiences: Road maintenance workers.

Overall Ratings: T2 Trainer — subject matter Good, picture quality Fair

162 Bridge Maintenance — Structure Inspection

Utah DOT
18 minutes

This tape lists the steps that should be taken to properly inspect a bridge and to determine maintenance needs. It covers checking alignment, looking for collision damage, horizontal cracking, and exposed rebar. Also covered are hinges and bearings, slope protection, ends of parapets, spalled concrete, deck condition, joints, dirt accumulation on deck, drainage, and debris around piers. The tape deals with "what to look for" rather than how to fill out a rating form.

Audiences: Bridge inspectors and bridge maintenance crews.

Overall Ratings: T2 Trainer — subject matter Excellent, picture quality Fair

163 Shoulder Maintenance

Utah DOT
10 minutes

The subject of this tape is the need for proper drainage from the road surface. This requires a properly sloped and maintained shoulder. The steps for proper shoulder maintenance are explained including traffic control, pulling shoulders, and spreading additional material where necessary.

Audiences: Road maintenance foremen and grader operators.

Overall Ratings: T2 Trainer — subject matter Good, picture quality Fair

164 Mowing

Utah DOT
9 minutes

Mowing is needed for safety, attractiveness, and to eliminate snowdrift line in regions of heavy snowfall. This tape sets forth guidelines for effective mowing based on height of vegetation and type of road. It identifies where to mow and what width to mow.

Audiences: Road foremen and mower operators.

Overall Ratings: T2 Trainer — subject matter Very Good, picture quality Fair

165 Weed Control

Utah DOT
12 minutes

The need for weed control is addressed from an economic viewpoint. The steps for chemical control of weeds are outlined as (1) identification of weeds; (2) determining when application should be made to be effective; (3) determining the type of chemical to use; and (4) rate of application of the chemical.

Audiences: People engaged in weed control.

Overall Ratings: T2 Trainer — subject matter Very Good, picture quality Fair

166 Bridge Maintenance — Cleaning and Clearing

Utah DOT
17 minutes

Dirt and water can weaken and bring down any structure, so it is important that proper attention be given to cleaning under the structure, cleaning the deck, and clearing out the drainage system. This tape shows the use of a bucket truck and high pressure water jet to clean the understructure, an inductor and sweeper for cleaning the deck, and ways to clean and maintain the drainage system.

Audiences: Foremen and bridge maintenance crews.

Overall Ratings: T2 Trainer — subject matter Very Good, picture quality Fair

167 Drainage Maintenance

Utah DOT
10 minutes

The steps for proper drainage maintenance are shown. Emphasis is placed on determining the problem for poor drainage and then providing proper corrective action.

Audiences: Road foremen and road maintenance workers.

Overall Ratings: T2 Trainer — subject matter Very Good, picture quality Fair

168 Minor Slide Removal

Utah DOT
12 minutes

This tape shows the procedures for removing minor slides from ditches using both grader and loader. Steps shown are: traffic control, piling excess material, loading trucks, and restoring ditch to original flow line and slope.

Audiences: Road foremen and maintenance crews.

Overall Ratings: T2 Trainer — subject matter Good, picture quality Fair

169 Guard Rail Maintenance

Utah DOT
28 minutes

A proper guardrail installation requires proper rail, post, and blockout. It is necessary to make repairs that retain or improve the original design features. This tape shows the proper method for removing damaged sections, posts, etc., and how to make the repairs.

Audiences: Road foremen and maintenance crews.

Overall Ratings: T2 Trainer — subject matter Very Good, picture quality Fair

170 Tow-Type Sweeper Operation

Utah DOT
25 minutes

This video has three parts. The first part covers the daily check which includes walkaround, engine checks, greasing, and checking the broom and its adjustment. The second part shows proper operation and covers startup, hookup, sweeping operation, and shutdown. The third part covers preventive maintenance that should be done every 30 hours.

Audiences: Road foremen and equipment operators.

Overall Ratings: T2 Trainer — Good

171 Weed Sprayer Operation

Utah DOT
25 minutes

The major components for a weed sprayer including water tanks, chemical tanks, pumps, hand hoses, and spray systems, and computerized controls are described. Also covered are the daily preventive maintenance and the steps that should be taken for the operation of the system.

Audiences: Those involved with weed control.

Overall Ratings: T2 Trainer — subject matter Good, picture quality Fair

172 Dump Truck Operation — Tandem Axle

Utah DOT
21 minutes

This tape shows the operation of a tandem axle dump truck with emphasis on shifting with a 13-speed Fuller Road Ranger gear box and use of an engine brake (Jake brake).

Audiences: Truck drivers.

Overall Ratings: T2 Trainer — subject matter Good, picture quality Fair.

173 Dump Truck Operation — Working With Pups

Utah DOT
12 minutes

This tape shows the use of a pup trailer in conjunction with a tandem-axle dump truck. Points highlighted include hookup, towing, loading, dumping both truck and trailer, spreading both truck and trailer, and unhooking.

Audiences: Truck drivers

Overall Ratings: T2 Trainer — subject matter Very Good, picture quality Fair

174 Dump Truck Operation — Preventive Maintenance

Utah DOT
19 minutes

This deals with preventive maintenance for tandem-axle dump trucks. It includes changing oil and filters, checking, lubrication, servicing air filter and battery, inspection of air intake system, exhaust system, and tires.

Audiences: Truck drivers, shop personnel.

Overall Ratings: T2 Trainer — subject matter Good, picture quality Fair

175 Transportation and Wetland Protection

WSDOT
15 minutes

The tape emphasizes the importance of Washington's wetlands. Various types of wetlands are explained, e.g., wetlands serve many beneficial functions and are protected by various laws and regulations. References are made to WSDOT's *Design Manual* and other documents for criteria when highways impact wetlands. Procedures that WSDOT uses may also be useful information for local agencies and even other states.

Audiences: General.

Overall Ratings: T2 Manager — Very Good

176 The Best Defense . . . Is a Good Road

FHWA and Cornell University Local Roads Program (RTAP Technical Project No. 52D)
14 minutes

This tape has purposely been tailored for cities and counties and smaller units of government. The tape covers (1) common causes for tort actions, (2) need for inspections and reporting, (3) accident data, and (4) record keeping requirements. Actual court scenes highlight the importance of good risk management techniques to reduce tort liability and accidents. This is a good basic film with an accompanying pamphlet.

Audiences: All public works employees.

Overall Ratings: T2 Manager — Excellent

177 Breakaway Timber Utility Poles

DOT/FHWA (1989)
15 minutes

Problems of utility poles close to the travel lanes of roads and streets are emphasized. One alternative to improving safety is by the use of breakaway timber utility poles. Slip hose connections, upper hinged mechanism, and two steel wire support cables make up the key components of one breakaway design. Typical retrofitting of existing poles are detailed for a project in Kentucky. The tape ends with a summary statement by Jim Carney, Chief of FHWA's Railroads, Utilities, and Program Branch, regarding the potential and limitations of the breakaway utility poles and alternatives available to the highway agency. (Supplemental handout available.)

Audiences: Engineers, designers, and traffic safety administrators.

Overall Ratings: T2 Manager — Excellent

178 Pedestrian Safety (What Can You Do)

FHWA (1989)
9 minutes

This 9-minute video presentation is directed to both average citizens and public officials responsible for public safety. It covers pedestrian safety problems and needs in urban and rural areas. The video documents many of the most common pedestrian safety problems and identifies countermeasures for each. The video was made to demonstrate what can be done to improve pedestrian safety and to present what information is currently available from the Federal Highway Administration in this area. This video also addresses the problems of pedestrian safety for the handicapped. A brief description of the pedestrian problems and suggested reference materials is also enclosed.

Audiences: General, citizen groups, and civic organizations.

Overall Ratings: T2 Manager — Very Good

179 Highway Capacity, Level of Service, and Characteristics of Traffic Flow for Local Government Officials

Delaware DOT and T2 Center
15 minutes

This extremely short tape provides an overview of the complex subject of highway and street capacity. Various terms as listed in the 1985 Capacity Manual are defined and explained, including level of service, weaving, etc. The tape separates discussions on capacity according to whether one is discussing freeways, arterials, intersections, or two-lane highways. Numerous photos are shown of freeways, arterials, and intersections.

Audiences: General.

Overall Ratings: T2 Manager — Very Good (Overview)

180 Commercial Driver's License Overview

Pennsylvania DOT
13 minutes

This tape is the first of a series of ten that are designed to prepare drivers to take the knowledge and driving skills examinations to obtain a Commercial Driver's License and the four endorsements. It identifies what is considered to be a commercial vehicle and what endorsements are required for various types of vehicles. It then gives an overview of what is included in the following series and how they can be used to prepare for the exams.

Audiences: All who may be expected to obtain a Commercial Driver's License.

Overall Ratings: T2 Trainer — Excellent

181 Commercial Driver's License — Common Procedures Required for All Classes of Drivers

Pennsylvania DOT
120 minutes

This tape covers parts 2-5 of the 10-part series to prepare drivers for the Commercial Driver's License. The first part deals with vehicle inspection and sets forth a 7-stop pretrip inspection, operating checks that should be done, and the post-trip inspection. The following two sections deal with operating techniques for basic control of the vehicle and space management. Included are acceleration, deceleration, backing, shifting, turning, stopping distance, nighttime driving, winter driving, summer driving, mountain driving hazards, and emergency situations. The last section deals with vehicle safety which includes what to do in case of an accident, danger of fires and ways to prevent and extinguish them, ways to stay alert, avoidance of alcohol and drugs, and need to have knowledge of hazardous materials and how to identify them.

Audiences: All who may be expected to obtain a Commercial Driver's License.

Overall Ratings: T2 Trainer — Excellent

182 Commercial Driver's License — Transporting Cargo and Air Brakes

Pennsylvania DOT
46 minutes

This tape covers two parts of the series to prepare drivers for the Commercial Driver's License. The first portion covers the steps necessary to make sure that the cargo is properly loaded and secured to lower the center of gravity and reduce shifting of the load. It also covers liquid cargo. The second part covers the air brake system explaining the component parts and operation. Inspection of the system and how to use the air brakes are covered.

Audiences: All who may be expected to obtain a Commercial Driver's License.

Overall Ratings: T2 Trainer — Excellent

183 Commercial Driver's License — Transporting Passengers

Pennsylvania DOT
15 minutes

This tape covers the operation of passenger-carrying vehicles that require a Commercial Driver's License with a passenger endorsement. The pretrip inspection of the vehicle, the loading of passengers, storage of baggage, passenger notification and control, where stops and caution are required and post-trip inspection are covered.

Audiences: All who may be expected to have a passenger endorsement on their Commercial Driver's License.

Overall Ratings: T2 Trainer — Excellent

184 Commercial Driver's License — Combination Vehicles

Pennsylvania DOT
31 minutes

This is the portion of the Commercial Driver's License series that covers the material covered in the examination for the combination vehicle endorsement. It covers safety factors concerning loading and speed on curves and turns. It gives information on off-tracking and procedures for making turns. It covers the air brake systems, procedures for coupling and uncoupling the trailers and dollies, and pretrip inspection following hookup.

Audiences: All who may need a combination vehicle endorsement for their Commercial Driver's License.

Overall Ratings: T2 Trainer — Excellent

185 Commercial Driver's License — Hazardous Material

Pennsylvania DOT
46 minutes

This covers the material needed to get a hazardous material endorsement for the Commercial Driver's License. It covers hazardous materials rules; driver's responsibilities; loading and unloading; and bulk tank loading, unloading, and marking.

Audiences: All who may need a hazardous material endorsement for their Commercial Driver's License.

Overall Ratings: T2 Trainer — Excellent

186 Pavement Management Systems

USCOE and FHWA
21 minutes

A general tape on the subject of unsurfaced road management that is in three parts. It explains the program for rating unsurfaced roads. The system is fully described in a workbook, Special Report 87-15, prepared by USCOE.

The first part is an introduction that identifies the information that will be derived from implementing the program.

The second part shows the field crew how to make the inspection, fill out the rating sheet, and complete the road inventory.

The third part shows how to set up the system and obtain the unsurfaced road condition index that can be useful in setting maintenance priorities, justifying a budget, forecasting maintenance requirements, and forecasting budget needs.

Audiences: General maintenance foremen, field raters of unpaved roads, and their supervisors.

Overall Ratings: T2 Manager — Good

187 Idea Store — Edition 3

Pennsylvania T2 Center — 1989
10 minutes

Various ideas are presented that have been submitted to the Pennsylvania T2 Center from throughout the country.

Subjects covered are two different types of lifters for changing plow blades, way to remove and store locking pin on articulated loader from within the cab, pamphlet on daily maintenance of motor grader, yard cleaner for removing metal, use of precast panelized wall units to eliminate stream erosion, and patching using a box mounted on the front of a motor grader.

Audiences: General maintenance personnel.

Overall Ratings: T2 Trainer — Good

188 Guardrail Installation and Repair

Northwest T2 Center and Alaska T2 Program
20 minutes

This tape was created from a presentation by Mr. Don Gripne of WSDOT at the 1989 Road and Street Maintenance School. It points out the evolution of guardrail standards, the elements of guardrail standards, and the elements of a typical W-beam guardrail and its proper installation. It covers the treatment of guardrail ends and guardrail repair.

Audiences: People responsible for installation and maintaining guardrails.

Overall Ratings: T2 Manager — Excellent

189 Digging Dangers

Underground Focus Magazine
15 minutes (Copyrighted)

This is a brief informational aid for damage prevention of underground facilities during excavation. It covers various safeguards to be taken such as first determining the underground utilities involved by possibly contacting “One-call system centers.” It also gives a brief overview of new technology used such as marking devices and test pit excavation by suction with minimum risk of damage to utility lines. The last portion of the tape treats the legal aspect of damage to utilities.

Audiences: Best suited to construction supervisors and excavation equipment operators.

Overall Ratings: T2 Manager — Excellent

190 Traffic Barriers — An Overview

FHWA
46 minutes

This video training module is a training aid to “W-Beam Guardrail Repair and Maintenance” handbook and is divided into three parts. Part I is an overview of Common Traffic Barriers; Part II treats W-Beam Wood and Steel Post Guardrail Systems; and Part III covers the common terminals for W-Beam Guardrail Systems. It covers more the maintenance procedures of various types of standards, terminals and transition sections rather than design and selection.

Audiences: Road maintenance crew and road superintendents more than design engineers.

Overall Ratings: T2 Trainer — Very Good

191 Liquid Propane (LP) Gas — Know the Facts

FHWA and Texas Department of Highways and Public Transportation
11 minutes

This informational tape points out the dangers of LP gas and how to work with it. It explains the five main ways to prevent dangerous circumstances. Those are: (1) Allow only trained personnel to fill containers, (2) Detect leaks, (3) Store containers correctly, (4) Handle cylinders carefully, and (5) Use LP gas properly.

Audiences: All people who work with LP products — generally all maintenance and construction workers.

Overall Ratings: T2 Trainer — Very Good

192 Pavement Management

FHWA
25 minutes

This tape defines a Pavement Management System as, “A set of tools or methods that assist decision makers in finding cost-effective strategies for providing, evaluating, and maintaining pavement in a serviceable condition.” It identifies the steps to implement a system and the benefits that will be derived.

Audiences: Public works directors, road superintendents, and maintenance engineers.

Overall Ratings: T2 Trainer — Good

193 Safety Restoration During Snow Removal

FHWA
25 minutes

This tape stresses the need to reduce the hazards following the emergency snow removal operation. The post storm cleanup should eliminate the snow and ice based on the hazard ranking which is determined by evaluating the risk, severity, correctability, and exposure. The four most serious ranked hazards, the five serious ranked hazards, and the seven important ranked hazards are identified and the steps necessary to eliminate them are discussed.

Audiences: County and city maintenance engineers, foremen, and plow operators.

Overall Ratings: T2 Trainer — Very Good

194 Idea Store — Edition 4

Pennsylvania T2 Center — 1990
10 minutes

Various ideas are presented that have been submitted to the Pennsylvania T2 Center from throughout the country. Subjects covered are: (1) prefabricated grates to install at driveways, (2) means of reducing snow and ice buildup on underside of trucks used as plows, (3) cross conveyor for placing material to build up shoulder, (4) old plow blade welded to grader mold board to eliminate material tailing from the blade, (5) use of discarded tires for slope protection, and (6) a portable sign display for emergency road closures.

Audiences: General maintenance personnel.

Overall Ratings: T2 Trainer — Good

195 Subsurface Utility Engineering

FHWA
13 minutes

Subsurface utility engineering is an emerging technology. This tape shows the use of electromagnetic and sonic equipment to precisely locate utilities in order to design highway improvement projects to minimize conflicts with underground benefits. The benefits of subsurface utility engineering are identified with the end results being reduced costs, expeditious delivery of the completed facility, and the elimination of safety hazards and service disruptions.

Audiences: Public Works directors, city and county engineers, and design engineers.

Overall Ratings: T2 Trainer — Good

196 The Hazards of Hurry

Caterpillar Company
21 minutes (Copyrighted)

Considered by many to be the most useful earth moving machines in the world, backhoe loaders are found on job sites everywhere. This program, presented in the interest of safety for all backhoe loader operators, shows some of the most typical backhoe accidents caused by the human tendency to “hurry up.” The film is endorsed by the National Safety Council.

Audiences: Backhoe loader operators.

Overall Ratings: T2 Manager — Excellent

197 Everything Rides on Roads

Allied Video
27 minutes (Copyrighted)

Although this film dramatizes the many benefits of the U.S. highway system, the basic message states it is our responsibility to protect, maintain, and upgrade this valuable national asset. Otherwise, the entire transportation system will be threatened. The message needs more public awareness. Cleared for Broadcast TV.

Audiences: General audiences.

Overall Ratings: T2 Manager — Good (nontechnical)

198 Down is Up

Caterpillar Company
20 minutes (Copyrighted)

Based on actual happenings, this film discusses some of the relatively simple preventive maintenance procedures that can help assure maximum availability. The story is told from the viewpoints of contractors, job superintendents, machine operators, and mechanics.

Audiences: Equipment operators and superintendents.

Overall Ratings: T2 Manager — Good

199 Everything to Lose

Caterpillar Company
21 minutes (Copyrighted)

This film shows the terrible consequences of ignoring shop safety rules . . . it contains chilling reenactments of recorded accident situations. Its message is loud and clear for all who work around machine tools and material handling equipment. An older tape, but it is still valid.

Audiences: General shop workers.

Overall Ratings: T2 Manager — Good

200 Signals: Read 'Em or Weep!

Caterpillar Company
20 minutes (Copyrighted)

Ideal for Cat Care meetings, this film will help guard against unnecessary repair costs. Maintenance abuse — ignoring warnings and recommended repair procedures — costs owners in downtime and dollars, even though most of the abuse may be unintentional. A dozen actual case histories are included as well as all types of equipment.

Audiences: Equipment operators and their supervisors.

Overall Ratings: T2 Manager — Excellent

201 Roll of Drums

Caterpillar Company
20 minutes (Copyrighted)

Although produced some time ago, this dramatic film on operating safety of machines in all markets remains popular because of the attention-getting manner in which the subject is presented.

Audiences: Equipment operators and their supervisors.

Overall Ratings: T2 Manager — Excellent

202 Operating Tips — Motor Graders

Caterpillar Company
19 minutes (Copyrighted)

This is a basic tape for all motor grader operators, especially beginners. A good refresher for more experienced operators. Some interesting scenes from older days are included.

Audiences: Grader operators.

Overall Ratings: T2 Manager — Good

203 Winter Driving — Trucks

American Trucking Association
8 minutes (Copyrighted)

This tape recommends several tips for safer driving during typical winter driving conditions. It also provides guidance on how to deal with emergency situations that may be encountered.

Audiences: Heavy truck drivers and their supervisors.

Overall Ratings: T2 Trainer — Fair to Good (basic information)

204 Skid Control and Recovery

American Trucking Association
10 minutes (Copyrighted)

This tape explains what happens during a skid, how a truck can get into a skidding situation, and the best way for a driver to correct the predicament.

Audiences: Truck and tractor/trailer drivers.

Overall Ratings: T2 Trainer — Good

205 City Driving

American Trucking Association
19 minutes (Copyrighted)

This tape is aimed at the delivery truck driver, like UPS. It includes tips for backing, scanning, turning at intersections, loading trucks properly, and customer service.

Audiences: Freight line drivers, UPS drivers, etc.

Overall Ratings: T2 Trainer — Fair

206 The Critical Factor

American Trucking Association
10 minutes (Copyrighted)

Most truck drivers have a fear of driving a fully loaded rig and having a blowout. This does not have to be a fatal situation as explained by this tape. The tape gives some tips on what can be done to maintain control of the vehicle and to bring the rig to a safe stop after a tire blowout.

Audiences: Large truck drivers.

Overall Ratings: T2 Trainer — Very Good

207 Confined Space Entry

Summit Training Sources Inc.
20 minutes (Copyrighted)

Entry into confined spaces can be dangerous or fatal. Confined spaces includes manholes, utility vaults, and storage tanks. This tape defines confined spaces and the hazards associated with them. It explains the proper pre-entry procedures, attendant responsibilities, and emergency rescue procedures.

Audiences: Anyone that might enter a confined space.

Overall Ratings: T2 Trainer — Good

208 Tractor — Steering Axle Braking and Stability Tests

ICBC (Copyrighted)
17 minutes — July 1986

This video is a composite of several controlled tests performed on tractor trailers to study the effects of varying degrees of steering axle braking. The tests are performed at different speeds on both wet and dry pavements.

Audiences: Truck drivers.

Overall Ratings: T2 Trainer — Picture quality is Fair to Poor (Very limited narrative for understanding what is going on.)

209 Rollover

Motor Vehicle Manufacturers Association
20 minutes (Copyrighted)

There are thousands of rollover accidents involving tractor trailers across the nation every year. This tape reviews the causes and effects of rollovers in terms of a vehicleÆs handling characteristics, and how different vehicles perform in rollover situations.

Audiences: General truck drivers.

Overall Ratings: T2 Trainer — Good

210 Front Wheel Brakes — Dispelling a Myth

USDOT
6 minutes

Three days of demonstration tests sponsored by the USDOT are summarized in this video. Twelve professional truck drivers operating five different trucks were asked to perform three different maneuvers: braking in a curve, braking during a lane change, and braking in a straight line. Each of the maneuvers is performed with the front brakes connected and then disconnected.

Audiences: Truck drivers.

Overall Ratings: T2 Trainer — Good

211 Within an Inch of Your Life (Air Brake Adjustment)

Northwest Alliance of Fleet Supervisors
5 minutes (Copyrighted)

This tape demonstrates the proper procedures for evaluating and adjusting air brakes. It also shows what can happen with improperly adjusted brakes.

Audiences: Truck mechanics and drivers.

Overall Ratings: T2 Trainer — Good

212 Aluminum Spring Brake Cover Corrosion Investigation

Transport Canada
9 minutes

This tape identifies two types of spring brake assemblies that have experienced failures on the road, at loading docks, and during servicing. The failures have the potential to cause serious injury to the mechanic or anyone that happens to be standing nearby. This tape shows how to properly remove and dispose of these units.

Audiences: Truck mechanics.

Overall Ratings: T2 Trainer — Fair to Good

213 Idea Store — Edition 5

Pennsylvania T2 Center — 1991
11 minutes

Several ideas are presented that have been submitted to the Pennsylvania T2 Center from throughout the country. Subjects covered are: (1) Hard hats, (2) proper tire inflation, (3) safety grams, (4) proper signing, and (5) Adopt-a-sign program.

Audiences: General maintenance personnel.

Overall Ratings: T2 Trainer — Good

214 Work Zone Safety for Rural Local Agencies

UNC ITRE and FHWA
1 hour 42 minutes

This tape is a complete outline of traffic control in work areas with separate sections on Traffic Control Devices, Traffic Control Zones, Typical Applications of Traffic Control Devices in Traffic Control Zones, Flagging, and Legal Liabilities. A short break after each section allows for a discussion of the material shown. Part 7: A Typical Day, is a review (8:13 min.) and may be eliminated if the length of the presentation is a problem.

Audiences: Construction and maintenance field supervisors and personnel.

Overall Ratings: T2 Trainer — Very Good

215 Technical Advancements for Maintenance Workers

SHRP
11 minutes

Thomas Larson of FHWA and Francis B. Francois of AASHTO explain the Strategic Highway Research Program (SHRP) and the importance of managing for the future. Numerous devices and procedures which are being researched in the maintenance of roads and streets are shown on the tape.

Audiences: Chief administrative officers of public agencies, researchers, and general audiences.

Overall Ratings: T2 Manager — Good

216 Vegetation Management — Part 2

Washington State Department of Transportation
20 minutes

This tape provides a good overview of basic vegetation management within the road rights of way. It includes biological control, fertilizing, chemical control, mowing, brush cutting, and tree trimming. The information provided is very basic but emphasizes the concept of vegetation management by the use of two or more available methods.

Audiences: Supervisors and maintenance workers doing vegetation management and control.

Overall Ratings: T2 Trainer — Very Good

217 The Thin Orange Line

ATSSA
Part 1: 12 minutes, Part 2: 20 minutes (Copyrighted)

This is a course of instruction for inspectors on construction projects for work zone traffic control. It includes references, objectives, and basic design of traffic control in Part 1. Part 2 shows examples of work zone traffic controls and instructions for inspections.

Audiences: Construction inspectors.

Overall Ratings: T2 Trainer — Good

218 Pavement Marking Inspection — Thermoplastic

ATSSA
21 minutes (Copyrighted)

This tape is intended as a course of instruction for inspectors on pavement marking projects using thermoplastics. It explains the materials, application, equipment, weather requirements, and necessary pavement conditions.

Audiences: Construction inspectors.

Overall Ratings: T2 Trainer — Good

219 Blind Spots

Centurion Video
12 minutes (Copyrighted)

This tape shows the blind spots for drivers of trucks and what to do to avoid resulting accidents. The examples shown involve mostly truck-trailer combinations; however, the subject matter pertains to all trucks.

Audiences: Truck drivers.

Overall Ratings: T2 Trainer — Good

220 Around Your Truck

Centurion Video
17 minutes (Copyrighted)

This video promotes safety in and around your truck including getting in and out of the cab and how to avoid accidents resulting from slipping and falling.

Audiences: Truck drivers.

Overall Ratings: T2 Trainer — Good

221 Forklift 1: Handling the Vehicle

Centurion Video
14 minutes (Copyrighted)

The do's and don'ts of forklift operations are shown. The tape may be used to train prospective operators.

Audiences: Personnel using forklifts.

Overall Ratings: T2 Trainer — Good

222 Right to Know

Centurion Video
14 minutes (Copyrighted)

The tape covers OSHA's "Right to Know" program and the requirement of employers to inform employees of hazardous materials and working conditions on the job site.

Audiences: All employees.

Overall Ratings: T2 Trainer — Good

223 Traffic Control for Urban and Utility Work Zones

ATSSA
55 minutes (Copyrighted)

All phases of traffic control are covered with particular emphasis on situations in urban areas. It is more applicable to city crews than the other tapes on the same subject. Some parts pertain to large cities.

Audiences: All city maintenance personnel.

Overall Ratings: T2 Trainer — Good

224 Pavement Marking Inspection — Two Part Epoxy

ATSSA
20 minutes (Copyrighted)

This is a course of instruction for project inspectors on pavement marking contracts involving two part epoxy materials. This includes an explanation of the material and its use, the equipment used and the requirements for proper application.

Audiences: Construction inspectors.

Overall Ratings: T2 Trainer — Good

225 Trench Shields

National Safety Council
12 minutes (1991) (Copyrighted)

The use of trench shields for underground safety is explained in this video. This is one method of providing worker protection in trenches for pipe installation.

Audiences: Construction and maintenance workers and supervisors.

Overall Ratings: T2 Trainer — Good

226 It Always Happens to the Other Guy

John Deere Co.
20 minutes (Copyrighted)

This is a very old, but very good video about safety in equipment operations of all kinds.

Audiences: All construction and maintenance workers.

Overall Ratings: T2 Trainer — Very Good

227 DOT Growth Management

Washington Transportation Training Group
15 minutes

This video provides an overview of the transportation provisions of Washington's Growth Management Program including the relationship between land use and transportation facilities.

Audiences: All personnel involved with transportation planning and the general public.

Overall Ratings: T2 Trainer — Very Good

228 Paths of Thunder

Florida East Coast Recycling Company
20 minutes (Copyrighted)

This tape presents examples of the danger of railroad crossings and other railroad facilities, and safety considerations to avoid them.

Audiences: All employees.

Overall Ratings: T2 Trainer — Good

229 Idea Store — Edition 6

Pennsylvania T2 Center — 1991
17 minutes

Several ideas throughout the country are presented that have been submitted to the Pennsylvania T2 Center. Subjects covered are: (1) wildflowers, (2) adopt-a-highway; (3) signs; (4) brainstorming box; (5) light cages; (6) prefabricated walls; (7) fabricated posts; (8) roads scholar I and II; (9) safety packet.

Audiences: General maintenance personnel.

Overall Ratings: T2 Trainer — Good

230 Choices: Transportation for Washington's Environment

Washington State Department of Transportation
12 minutes

This tape explores the problems of air, water, and noise pollution in the state of Washington as a result of existing modes of transportation. It also emphasizes the need for special consideration for wildlife habitat and wetlands in the development of transportation corridors.

Audiences: General.

Overall Ratings: T2 Trainer — Good

231 Manlift — The Elliott — Part 2

WSDOT
27 minutes

This tape features (1) pretrip inspection, (2) start-up procedures, (3) operation, and (4) shutdown procedures. It also illustrates proper safety techniques while using the manlift.

Audiences: State, county, city work forces, particularly those involved in maintenance.

Overall Ratings: T2 Trainer — Good; Participants — Good

232 Snow Plow and Spreader Operation

Delaware Department of Transportation
Part One: 18:30 minutes
Part Two: 20 minutes

This tape is a remake of a video by the same title listed as Tape 84 in this catalog. Among other changes, it includes hydraulically reversible plows and hopper spreaders. Part One covers hook up and servicing of the equipment. Part Two explains plowing and spreading techniques on the road.

Audiences: Snowplow operators.

Overall Ratings: T2 Trainer — Excellent

233 No Exit

Operation Lifesaver
20 minutes

This tape was prepared for Operation Lifesaver, a nationwide program stressing the importance of safety at railroad crossings. The subject is very well presented.

Audiences: General.

Overall Ratings: T2 Trainer — Fair due to picture quality (There are some bad spots in the picture quality towards the end of the tape.)

234 Loader/Backhoe Operations — Operator Safety — Part I

15 minutes

This 1991 tape is a very good film for the operator of the loader/backhoe. For the newer operator, it points out many of the pitfalls that can befall the unwary and serves as a good reminder to the “old-hand” of some of the risks he may have forgotten or has ignored. It is also a good film for anyone working around this machine.

Audiences: All maintenance and construction workers.

Overall Ratings: T2 Trainer — Good

235 Loader/Backhoe Operations — Worker Safety — Part II

15 minutes

This 1991 tape is a must-see for all persons working with or around the loader/backhoe. It sets out a personal four-point safety plan as well as the perils involved with and around excavations.

Audiences: All maintenance and construction workers.

Overall Ratings: T2 Trainer — Excellent

236 Timber Bridge 2

Pennsylvania Dept. of Transportation — 1992
28 minutes

This tape emphasizes the economical and environmental reasons for using timber for bridges. An illustrated example of a timber bridge is shown from design through the fabrication and installation process.

Audiences: Public works directors, designers, and superintendents.

Overall Ratings: T2 Assistant — Very Good

237 Full Depth Reclamation

Asphalt Recycling and Reclamation Association — 1992
12 minutes (Copyrighted)

This tape discusses the economical and environmental advantages of using full depth reclamation. It also goes through the steps of the process and why more agencies are using this technique as their base course.

Audiences: Road superintendents, project engineers, and public works directors.

Overall Ratings: T2 Assistant — Good

238 Idea Store — Edition 7

Pennsylvania T2 Center — 1992
10 minutes

Several ideas are presented that were submitted to the Pennsylvania T2 Center from throughout the country. Subjects covered are: (1) Dump Truck Air Foil, (2) Better Cylinder Wrench, (3) Curb Scraper, (4) Timber Bridge Information, and (5) DelChester Public Works Association Conference of Idea Sharing.

Audiences: General maintenance personnel.

Overall Ratings: T2 Assistant — Fair to Good

239 Testing and Field Inspection of Roadway Delineation

FHWA
35 minutes

This film depicts procedures for field inspection of roadway delineation. Part 1 covers preapplication procedures, application of pavement markings, and inspection of new markings. Part 2 covers application of other delineation and maintenance and inspection of existing delineation.

Audiences: Maintenance foreman, road striping crews, inspectors.

Overall Ratings: T2 Trainer — Good

240 A Striper's Survival Guide

American Traffic Safety Services Association — 1992
12 minutes (Copyrighted)

This video focuses on crew safety during pavement striping operations. It describes some of the hazards associated with pavement marking materials and equipment, and how workers can protect themselves through the use of protective clothing, good housekeeping, and proper traffic control.

Audiences: Maintenance foreman and road striping crews.

Overall Ratings: T2 Assistant — Very Good

241 Proctor Compaction Test

Arkansas T2 Center/APWA — 1991
11 minutes

The proctor compaction test is a laboratory test for soils which is used to help determine field compaction. This video gives a general overview of the procedures involved in performing the proctor test.

Audiences: Soils engineer and laboratory technician.

Overall Ratings: T2 Assistant — Good

242 Arrow Panels

FHWA — 1992
25 minutes

This video discusses the various uses of arrow panels throughout the different types of work zones. It discusses many things to consider before using an arrow panel such as mode selections, design standards, applications and placement standards, cost and equipment maintenance, and recommendations. This tape should be seen by personnel using arrow panels on the job.

Audiences: All maintenance and construction personnel designing or working in traffic control work areas.

Overall Ratings: T2 Assistant — Very Good

243 Barrier Delineation in Work Zones: The Well Defined Path

FHWA — 1992
24 minutes

Delineation devices are used to separate traffic, protect traffic, and channelize traffic. This video explains various facts of barrier delineation that you should know before using them. It discusses standards, placement situations, delineation techniques, end treatments, maintenance, and selection. This video is a must see if using barrier delineation in a work zone.

Audiences: All personnel working in traffic control work zones.

Overall Ratings: T2 Assistant — Very Good

244 New Work Zone Safety Devices

Strategic Highway Research Program (SHRP)
17 minutes

This video explains how SHRP has developed new work zone safety devices that will make workers/equipment conspicuous, improve productivity, reduce congestion, improve communications with motorists, and save the lives of everyone. The new devices that are described are warning devices, portable speed bumps, delineation devices, lighting devices, signing/lighting devices, and barrier devices.

Audiences: All personnel using traffic safety devices.

Overall Ratings: T2 Assistant — Very Good

245 Subsurface Utility Engineering: A Technology for the 90s

13 minutes (Copyrighted)

Subsurface Utility Engineering is a technology that is increasing in use. It is used to identify where subsurface utility lines are before a disaster can happen. This video describes how it can be helpful in the design process, economic benefits, and risk management.

Audiences: Public works directors, planners, agency managers, and supervisors.

Overall Ratings: T2 Assistant — Very Good

246 1991 AASHTO Technology Transfer Fair

SHRP
59 minutes

This video takes you through the various exhibits at the fair. The topics they touch on are worker safety, snow and ice control, highway maintenance, concrete, asphalt, LTPP, and miscellaneous others. It is a good tape that explains new technology that is being developed in the various fields.

Audiences: All personnel.

Overall Ratings: T2 Assistant — Good

247 Fish Passage Through Culverts

FHWA and USDA Forest Service
14 minutes

This video explains how a hydrologist, a fish biologist, and an engineer all play a crucial part in the designing of a roadway over a stream. It describes the types of culverts and some factors to look for in deciding the type to use. This video gives the advantages and disadvantages to both the fish and the engineers if the culvert is not maintained.

Audiences: All engineering and maintenance staff.

Overall Ratings: T2 Assistant — Very Good

248 Effective Snow Fences

SHRP
Part I — 10 minutes
Part II — 11 minutes

Part I of this video is directed to administrators because it explains why you should use snow fences. It describes how snow fences can improve highway safety and reduce maintenance costs.

Part II is for maintenance and construction personnel because it explains how they work, the design and construction of them, the placement of them, and various other factors to consider to have the snow fence meet your needs.

Audiences: Administrators and maintenance personnel.

Overall Ratings: T2 Assistant — Very Good

249 Fundamentals of Shielded Arc Welding

G.E. Welding Laboratories
64 minutes (Copyrighted)

A good film on the fundamentals of shielded arc welding. Good graphics illustrating what actually occurs during the welding process. It also illustrates the need for proper arc length, angle of electrode, current setting, speed of travel, and safety procedures.

Audiences: A good review for all persons engaged in arc welding.

Overall Ratings: T2 Trainer — Good

250 Modern Timber Bridges: A New Return for Old New England

Rhode Island T2 Center
18 minutes

This film deals with the replacement of a short span steel and concrete structure with a modern treated wood deck span using local materials and municipal crews. The film points out the monetary and time savings in the use of wood for short span bridges.

Audiences: Public works officials, town/county commissioners, and maintenance people.

Overall Ratings: T2 Trainer — Good

251 Maintaining Asphalt Roads (Blade Patching)

New Mexico DOT
12 minutes

A very good, detailed video showing the proper procedures for blade patching asphalt roads. The film breaks the procedure into its separate components and shows each step in close detail.

Audiences: Road maintenance superintendents, maintenance crews, and motor grader operators.

Overall Ratings: T2 Trainer — Good

252 Trenching and Shoring — The "Hole" Story

Don Brown Productions
13 minutes (Copyrighted)

This video explains the potential hazards of shoring and trains the employee in proper methods of shoring, and reinforces the supervisor's legal responsibilities for proper safety procedures.

Audiences: Supervisors and maintenance crews.

Overall Ratings: T2 Trainer — Good

253 Sexual Harassment in the Work Place

Don Brown Productions
12 minutes (Copyrighted)

This film takes a look at the problem, explains how to deal with it, and offers useful tips in avoiding/ eliminating sexual harassment, all without overstepping your current policies. The program is directed at employee-employee relationships, but also covers supervisor-employee relationships.

Audiences: All supervisors and employees.

Overall Ratings: T2 Trainer — Good

254 Recent Crash Tests of Roadside Safety Hardware

FHWA
33 minutes

This video consists of films of actual crash tests of five guardrail types, including two timber guardrails. The slow motion scenes provide an excellent look at the way guardrails function and accentuates the necessity of proper installation.

An interesting corollary is that the automobile is quite fragile and that seat belts should be worn.

Audiences: Public works officials, street superintendents, and maintenance crews.

Overall Ratings: T2 Trainer — Good

255 Residential Pickup — Driving and Helpers

Don Brown Productions
13 minutes (Copyrighted)

This video covers driver safety, vehicle safety, safe driving procedures, riding on vehicles, trash pickup, personal protection, customer relationships, slips and falls, back-door pickups, hazardous wastes, loading, dumping, using equipment and landfill safety for drivers and helpers.

Audiences: All solid waste personnel involved with solid waste pickup.

Overall Ratings: T2 Trainer — Good

256 Rear Loader Operations and Safety

Don Brown Productions
11 minutes (Copyrighted)

This video covers truck operations, helpers, loading the truck, can sites, container blockages, landfill safety, dumping, and residential safety.

Audiences: All solid waste personnel involved with solid waste pickup.

Overall Ratings: T2 Trainer — Good

257 “S” CAM Brake Adjustment

The Maintenance Council
15 minutes (Copyrighted)

This video shows how to adjust the “S” cam brake adjustment on manual and automatic systems and provides checks to ensure correct adjustment. Failure of these checks could mean a problem exists in the basic braking system, i.e., the drum, brake shoes, or springs. It also shows the driver how to make an adjustment while away from the shop.

Audiences: Mechanics and truck drivers.

Overall Ratings: T2 Trainer — Good

258 Chain Saw Safety

Louisiana DOTD
40 minutes

This film covers operating procedures and basic safety rules for all persons operating chain saws. The items covered include nomenclature, fuel, maintenance, chain sharpening, replacement of chains, bars and parts, kickback, and correct operating position. Safety is stressed throughout the film. A very good film for beginners and a good review for the more experienced operator.

Audiences: All maintenance personnel.

Overall Ratings: T2 Trainer — Good

259 Maintenance Tort Liability

Louisiana DOTD
40 minutes

This film defines tort liability for the maintenance crews, shows causes of tort claims due to poor maintenance practices, shows how maintenance crews can help in avoiding tort claims, and presents several actual cases describing the cause of the claim, the amount of the claim, who was at fault in the case, and the reasons for the judgement.

Audiences: All maintenance crews.

Overall Ratings: T2 Trainer — Good

260 Hydrated Lime — Key to Improved Asphalt Pavements

National Lime Association
23 minutes (Copyrighted)

This film covers the reasons for using hydrated lime in hot-mix asphalt pavements which are improved resistance to moisture, increased strength and durability, increased initial stiffness, reduces long-term viscosity and aging hardening, increased ductile flow at low temperatures, and increased pavement durability.

Audiences: Designers, pavement crews, and inspectors.

Overall Ratings: T2 Trainer — Good

261 Risk Management to Reduce Tort Liability

Section 4: Examples of Tort Related Lawsuits
Texas Department of Highways and Public Transportation
36 minutes

A filmed lecture with examples of tort claims against various transportation agencies. Examples are taken from state, county, and city governments. An interesting film with good examples of various types of tort claims by street and highway travelers.

Audiences: All levels of maintenance personnel.

Overall Ratings: T2 Trainer — Good

262 The Deposition

Pennsylvania DOT
17 minutes

This film follows a district traffic engineer through the process of giving a deposition. It outlines the purpose of a deposition and provides some do's and don'ts when giving them. Examples are given of types of questions that may be asked and how to properly answer them.

Audiences: All public works employees, especially foremen, supervisors, and engineers.

Overall Ratings: T2 Trainer — Excellent

263 Life in the Closed Lane

ATSSA
Part 1 — 25 minutes
Part 2 — 25 minutes (Copyrighted)

This is a training program for people who install and maintain traffic control devices for maintenance and construction work zones. The program is divided into two parts. Part 1 covers objectives of work zone traffic control, elements of traffic control zones, and pretrip inspections. Part 2 covers installing, maintaining, and removing traffic control devices, and focuses on the safety of those involved.

Audiences: All persons involved in traffic control work.

Overall Ratings: T2 Trainer — Good

264 Right Before Your Eyes

ATSSA
10 minutes (Copyrighted)

This video gives various reasons of the importance of pavement markings. How maintaining them improve drivers' safety by increasing their visibility at night, in bad weather, on dark highways, and for the impaired driver. They discuss the different types of pavement markings and how they are currently looking into creating some standards for them.

Audiences: All maintenance and construction personnel.

Overall Ratings: T2 Assistant — Good

265 Harmful Materials Awareness for Design Workers

Pennsylvania DOT
24 minutes

This video gives examples of actual situations and asks if there are any harmful materials present. It also takes you on a field review of a proposed project with the design staff, and asks you to identify potential harmful materials that are known or unknown. This video brings up your awareness for potentially harmful situations.

Audiences: All design personnel and field crews.

Overall Ratings: T2 Assistant — Excellent

266 Harmful Materials Awareness for Construction Workers

Pennsylvania DOT
22 minutes

This video presents actual situations that you may encounter while out on a construction site. It explains how to identify harmful materials and your responsibilities when running into these situations. It also identifies the dangers of harmful materials and how you may come into contact with them.

Audiences: All construction personnel.

Overall Ratings: T2 Assistant — Excellent

267 Harmful Materials Awareness for Maintenance Workers

Pennsylvania DOT
21 Minutes

This video shows spray painting, pipe cleaning, litter pickup, and other maintenance procedures, and asks you to identify the known and possibly unknown harmful materials that you may encounter. Many of the situations seem to be low risk but can change into a high risk operation if not handled correctly. They identify contaminants and how a higher dose of some can become dangerous for you and others.

Audiences: All maintenance personnel.

Overall Ratings: T2 Assistant — Excellent

268 Rehabilitation of Portland Cement Concrete Pavements Using Hot Mix Asphalt Overlays

National Asphalt Pavement Association (NAPA)
17 minutes

This tape explains how to repair Portland cement concrete pavement by using asphalt overlays and reducing or eliminating reflective cracking. They explain four rehabilitation techniques: (1) cracking and seating, (2) breaking and seating, (3) rubblizing procedure, and (4) saw cut and seal procedure. These techniques offer alternatives to the maintenance problems associated with reflective cracking in asphalt overlays on untreated concrete pavements. These techniques are workable, cost-effective, rehabilitation approaches that may be considered when evaluating deteriorating concrete.

Audiences: All engineering and maintenance personnel.

Overall Ratings: T2 Assistant — Good

269 The Safer Roadside

WSDOT
17 Minutes

This video shows how the Washington State Department of Transportation is providing citizens with safer streets and highways by making safer clear zones. The prime emphasis is how WSDOT and utility companies have cooperated in finding ways acceptable to both parties and the public in reducing the potential risk posed by utility poles.

Audiences: Public works officials.

Overall Ratings: T2 Manager — Very Good

270 Road to Loowit, the Spirit Lake Memorial Highway

WSDOT — 1993
15 Minutes

This video presents the building of a new highway, SR 504, to replace access to Mt. St. Helens which was destroyed by the volcano's eruption. Creative solutions are shown to fit the new facility into the environment.

Audiences: General

Overall Ratings: T2 Manager — Excellent

271 Aesthetic Bridge Rails and Guardrails

FHWA
8 Minutes

This **lecture-type** tape, a presentation of the *Summary Report on Aesthetic Bridge Rail and Guardrail* (Publication No. FHWA-SA-91-051), presents options for providing aesthetically pleasing guardrail and bridge rails along scenic highways. Three guardrails and three bridge rails are discussed. The tape shows crash testing and special features of each rail and briefly discusses the economic impacts of incorporating the rail into a highway design.

Audiences: Highway and Bridge Designers

Overall Ratings: Good

272 Concrete Bridge Railings (14 Minutes)
The Modified Thrie Beam Guardrails (9 Minutes)
Cable Guardrails (10 Minutes)

FHWA
33 Minutes Total

This **lecture-type** tape contains three distinct presentations on traffic barriers.

The first segment, Concrete Bridge Railings, discusses the requirements for crash testing bridge rails and compares 3 concrete rail systems: the New Jersey Shape, the F Shape and the Vertical Wall.

The second segment, the Modified Thrie Beam Guardrails, gives a brief history of the development of thrie beam guardrails and presents a recent modification of the design of the block out which improves its performance when struck by large vehicles.

The third segment, Cable Guardrails, discusses the uses of cable guardrail systems. This segment is incomplete.

Audiences: Highway and Bridge engineers and Designers

Overall Ratings: Good

273 Flagging Operations and Procedures

South Carolina Department of Highways and Public Transportation
23 Minutes

This brief tape provides an overview of the basic types of flagging operation following the MUTCD.

Audiences: Flaggers

Ratings: T2 Manager — Good

274 Soil Stabilization: Selecting the Modifier

FHWA
20 Minutes

This 1993 tape covers four types of modifiers used to stabilize soils. These include lime, lime-flyash, cement, and bituminous products. Each modifier functions differently depending upon the type of soil. Both passive (non-chemical) and active reactions are discussed. Considerable improvements are possible with their companion cost savings when using soil modifiers both during construction and for the finished product, e.g., less pavement design thickness.

Audiences: Primarily engineers, but general foreman can benefit also.

Overall Ratings: T2 Manager — Excellent

275 Cold In-Place Recycling

Asphalt Recycling and Reclamation Assn. — 1990 (Copyrighted)
10 Minutes

This video explains the cold in-place recycling process, including the train method and the single unit train method, the equipment used, and project selection research. It lists the following advantages of cold in-place recycling: it addresses the problems of deteriorating road surface such as cracking; it is useful in areas experiencing aggregate source problems; it causes minimal disruption of traffic; and it reduces costs.

Audiences: Road foremen, engineers

Overall Ratings: T2 Director — **Fair** visual qualities. Good presentation using a reconstruction train on a major project.

276 Hardsurfacing a Gravel Road Using Pre-Mix Asphalt

Missouri T2 Center — 1991
20 Minutes

This video demonstrates the steps involved in hardsurfacing a gravel road using pre-mix asphalt on a county/city road in Missouri.

Audiences: General public works people

Overall Ratings: T2 Director — **Fair**. Somewhat slow moving, good music, no changes were shown to improve line and grades of the gravel road.

277 Codington County Solution — Cold Inplace Recycling

SD DOT — 1990
16 Minutes (Copyrighted)

The video discusses a rural road project in Codington County, South Dakota. The tape takes you through an entire cold in-place recycling project. Benefits of stabilization include cost savings of 50 percent, conservation of virgin materials, use of less sophisticated equipment, and limited traffic disruption. The South Dakota road Profiler, which uses sensors mounted on a specially equipped van and a computer to plot the ride comfort before and after stabilization, is briefly discussed.

Audiences: Public works engineers and superintendents.

Overall Ratings: T2 Director — **Fair**. Visual qualities, good presentation. Tape 237 by ARRA is preferred.

278 Can a PC Help You?

Kansas T2 Center — 1990
29 Minutes (Copyrighted)

This video tape provides a brief introduction to personal computer technology for rural transportation agencies, focusing on the factors to be considered when preparing to purchase a first system and stressing effective applications of computer technology. Part I covers selecting a PC system. The main points are: (1) identify your needs, (2) select software, (3) select hardware, and (4) plan for ongoing costs. Part II covers PC applications such as word processing, spreadsheets, database management, CADD, GIS, and file management. Part III covers PC system components, including CPU, RAM, diskettes and hard disk drives, DOS, monitors, printers, and graphics devices. Part IV provides a closer look at examples of computer applications used by agencies.

Audiences: General

Overall Ratings: T2 Director — Good

279 Risk Management to Reduce Tort Liability
Section 1 — Introduction

Texas Department of Highways and Public Transportation — 1988
23 Minutes

A **lecture-type** tape on the basics of helping to reduce tort liability for public agencies. The video was prepared by taping an instructor of a class on this subject.

Audiences: General

Overall Ratings: T2 Director — **Fair**. Some good points are presented, however, the tape is **rather slow moving and is a video of a lecture**.

280 Sealcoating: A Matter of Science and Skill

Minnesota Local Road Research Board — 1993
17 Minutes

An overview of the “why” and “when” of sealcoating followed by a detailed presentation of the “how” of sealcoating. The video presents rational, scientific reasons for the methods presented and presents a clear message on what to do and what not to do during a sealcoating operation.

Audiences: Maintenance workers and public officials.

Overall Ratings: T2 Trainer — Good

281 Idea Store — Edition 9

Pennsylvania DOT — 1993
6 Minutes

A novel and effective way to remind operators of their blind spots while operating their equipment.

Audiences: General construction and maintenance workers.

Overall Ratings: T2 Trainer — Good

282 Underground Safety: Jobsite Hazards

National Safety Council — 1993
10 Minutes (Copyrighted)

Every construction site is filled with hazards. Learning to recognize these hazards is the first step in accident prevention. Learn the ten guidelines for a safe jobsite.

Audiences: Maintenance workers and public officials.

Overall Ratings: T2 Director — Good

283 Managing and Inspecting Unsurfaced Roads

USCOE — 1993
15 Minutes

This tape is a combination of two separate, shorter tapes. The first part of the tape explains “Paver,” a management tool. It is a system for rating unsurfaced roads and provides a basis for continuous maintenance of the unsurfaced road system. Auxiliary benefits to the user are also mentioned. Part two of the tape defines the types of distress occurring on unsurfaced roads, shows examples of each type, and illustrates how to measure the levels of severity for determining the correct rating for the road.

Audiences: Road superintendents and maintenance crews.

Overall Ratings: T2 Trainer — Good

284 Traffic Barriers and Control Treatment for Restricted Work Zones

NCHRP 1993
10 Minutes (Copyrighted)

This film explores the use of barrier treatment in restricted work zones. It depicts several different situations and suggests the treatment to protect the work site and the public in restricted work areas. The film explains the process used for the design and use of the barrier treatment including crash tests used in formulating some of the designs.

Audiences: Construction and maintenance personnel.

Overall Ratings: T2 Trainer — Good

285 Single Piece Rim Safety and Multipiece Rim Safety

Industrial Training, Inc. — 1985
25 Minutes (Copyrighted)

This film is a very good one for all those whose work requires that they work on or around truck tires. It covers the hazards involved in inflating, deflating, and demounting/mounting tires on single piece and multipiece rims. It also covers the points for which training was mandated by OSHA in 1980.

Audiences: Mechanics, equipment shop workers, and others who change tires.

Overall Ratings: T2 Trainer — Very Good

286 Response to Winter

Pennsylvania DOT — 1994
21 Minutes

Discusses levels of winter service that a department such as Pennsylvania DOT can be expected to provide. Explains priorities of road clearing and equipment. Discusses new types of equipment and design. Very good for general public presentations.

Audiences: Maintenance personnel, supervisors, and general public.

Overall Ratings: T2 Trainer — Good

287 Heavy Duty Starting and Charging System Diagnostics

American Trucking Assoc.
45 Minutes (Copyrighted)

This film covers the diagnosing of all parts of the vehicle starting and charging systems including the battery, alternator, solenoids, starting motor, and magnetic switches, using a load tester. This film is very detailed, and by using the techniques shown, the needless replacement of still serviceable parts can be avoided.

Audiences: All mechanics working on heavy equipment and other vehicles.

Overall Ratings: T2 Trainer — Good

288 Tire Repair Failure Analysis

American Trucking Association
12 Minutes (Copyrighted)

This film analyzes tire repair failures and explains how such failures can be avoided. It also shows what kind of tire damage should not be repaired and stresses that repairs should only be made by trained personnel.

Audiences: Shop personnel involved with mounting, demounting, and/or tire repair.

Overall Ratings: T2 Trainer — Good

289 Idea Store No. 8

Pennsylvania DOT — 1993
10 Minutes

An idea for reminding operators of the hazards of operating equipment is a key tag. Key tags are individualized for each type of equipment showing the operator the blind spots for his piece of equipment. Key tags are available for several types of equipment.

Audiences: Operators and equipment supervisors.

Overall Ratings: T2 Trainer — Good

290 Confined Space Entry — Class 1 Atmospheres

Minnesota DOT
8 Minutes

Part 1 of Minnesota DOT's Confined Space Entry Training Program. This film defines confined spaces and explains proper entry procedures for areas containing Class 1 atmospheres.

Audiences: All personnel involved in confined space entry.

Overall Ratings: T2 Trainer — Very Good

291 What's Your Orange IQ?

Minnesota DOT
21 Minutes

This film sets up problems for drivers in or around construction/maintenance work zones and poses several possible responses by a driver — you are asked to pick the correct response. A very good film for maintenance people to use when meeting with civic organizations or for other types of public relations.

Audiences: General audiences, all drivers.

Overall Ratings: T2 Trainer — Very Good

292 Lockout/Tagout Safety Procedures

Washington State Department of Labor and Industries
17 Minutes

This video is designed to help employer and employees understand what is required in the standard that applies to the control of energy during maintenance and servicing. The standard requires that employees develop procedures to be utilized whenever employees are exposed to partially hazardous energy sources.

Audiences: All employees engaged in confined space work situations and employees engaged in equipment or machinery maintenance.

Overall Ratings: T2 Trainer — Good

293 Oops — Your Office is Showing

Washington State Department of Labor and Industries
15 Minutes

This video is designed to help office personnel identify accident causes and how to prevent them. It is intended to help employers and employees establish a safe workplace. Points include: office accident causes, work station design, and safe lifting techniques.

Audiences: General office workers.

Overall Ratings: T2 Trainer — Good

294 Back Your Back

Washington State Department of Labor and Industries
15 Minutes

This tape explains the potential causes of back injuries and discusses ways to prevent back pain. How to establish load capabilities and proper positioning for lifting and carrying are also discussed.

Audiences: All employees.

Overall Ratings: T2 Trainer — Good

295 Working in Confined Spaces

Tel-A-Train
22 Minutes (Copyrighted)

This tape examines the hazards of working in confined spaces. It shows the proper use of protective equipment and rescue equipment including self-contained breathing apparatus and "D" ring harness systems. This film should be shown in conjunction with films 296 and 297.

Audiences: All personnel involved with confined space.

Overall Ratings: T2 Trainer — Excellent

296 Testing Confined Spaces

Tel-A-Train
25 Minutes (Copyrighted)

This film covers the procedures for testing confined spaces, covering the various types of testing equipment with their advantages and disadvantages. It also shows the effects of oxygen deprivation. This film should be used in conjunction with films 295 and 297.

Audiences: All personnel involved with confined spaces.

Overall Ratings: T2 Trainer — Excellent

297 Confined Space Safety

Tel-A-Train
15 Minutes (Copyrighted)

This film covers: how to recognize a confined space, understanding the hazards encountered in confined spaces, preparation for entry, safe work techniques and rescue practices and special circumstances. This film should be used in conjunction with films 295 and 296.

Audiences: All personnel involved with confined spaces.

Overall Ratings: T2 Trainer — Excellent

298 Efficient Driving

Connecticut DOT
6 Minutes

This short film by Connecticut DOT gives tips for driving more efficiently thereby resulting in better gas mileage and less maintenance. The practices shown reduce the overall cost per mile of driving.

Audiences: All persons driving governmental vehicles.

Overall Ratings: T2 Trainer — Good

299 The Naked Truth — Chain Saw Clothing

Forest Products Safety Association
6 Minutes (Copyrighted)

This award winning film promotes the use of protective clothing while using chain saws and the reasons why such clothing is necessary. Brief nudity.

Audiences: Maintenance personnel and all others who use chain saws.

Overall Ratings: T2 Trainer — Good

300 Extra Eyes for Maintenance

Pennsylvania DOT
32 Minutes

A very good film explaining how all maintenance people — office staff, design staff, as well as the road crews — have an opportunity and a responsibility to help reduce tort claims by reporting hazards or potential hazards so they may be taken care of before an accident or injury can happen.

Audiences: The entire municipal staff.

Overall Ratings: T2 Trainer — Good

301 Cylinder and Gas Apparatus Safety

CISCO Safety
28 Minutes (Copyrighted)

This is a filmed lecture presentation discussing acetylene and other compressed gasses used in welding and cutting processes. Many people using these gases are unaware of the hazards.

Audiences: All personnel working with or working around compressed gas containers.

Overall Ratings: T2 Trainer — Very Good

302 Finding Better Ways — New Research into Cost-Effective Pavement Repairs

SHRP 1992
19 Minutes

Some products and materials being tested by the Strategic Highway Research Programs are presented. Ideas are given for pothole repairs, spall repairs, crack sealing, and joint filling and sealing. Results of this testing will be documented by SHRP after a few years.

Audiences: Road superintendents and their staff.

Overall Ratings: T2 Director — Excellent overview of "what's coming up" in roadway maintenance and the importance of considering annual costs over "initial costs" of materials.

303 Underground Safety: Personal Protection

Construction and General Laborers District Council of Chicago and Vicinity
10 Minutes (Copyrighted)

This short tape lists ten basic rules for each person to remember for his/her own personal safety on the job site.

Audiences: All construction and maintenance people.

Overall Ratings: T2 Director — Excellent

304 The Clemson Beaver Pond Leveler: One Solution

South Carolina T2 Center
50 Minutes

A constant problem in drainage maintenance is presented because of environmental concerns that restrict trapping or removing beavers. The beaver pond leveler provides a proven alternative to older outdated methods of handling the beaver.

This video explains: the reason for the unit, construction and costs, and the method of installation for a variety of situations.

Note: The T2 Center has a leaflet that may be requested to go along with this video.

Audiences: General maintenance personnel including ditching crews and those involved in environmental considerations.

Overall Ratings: T2 Trainer — Excellent

305

308 Road Maintenance for All Four Seasons

Finnish National Road Administration
10 Minutes

This is a scenic and interesting video that describes the various activities before, during and after a winter in Finland and the special demands of each changing season. The use of new or innovative equipment and ideas are the main subject of the tape. Finnish techniques and equipment are quite modern and innovative.

Audiences: General maintenance workers, equipment mechanics, and public relations people.

Overall Ratings: T2 Trainer — Excellent

309 Retrofitted Load Transfer Devices

Keystone Engineering
5 Minutes (Copyrighted)

This short video explains a method of implanting 18 inch lengths of epoxy coated rebars into a section of 10-inch concrete road surface. The installation of these rebars is to help transfer the load of vehicles that have caused transverse cracking. The video demonstrates the use of a roto-mill machine cutting slots 2 inches wide, 5 inches deep, and 24 inches long. The epoxy coated rebar is then placed in the cracks which are filled with a high strength, fast setting mortar

Audiences: Maintenance crews and supervisors.

Overall Ratings: T2 Trainer — Very Good

310 Stop and Think (Sign Vandalism in Pierce County)

Pierce County Traffic Division 1994
6 Minutes (Copyrighted)

This short video explains the problem of sign and signal vandalism and damage within Pierce County. The process of reporting, responding and repairing is explained.

Several examples of sign vandalism are illustrated as well as some of the consequences of this damage.

Audiences: General public, public relations people, civic organizations, and maintenance crews.

Overall Ratings: T2 Trainer — Excellent

311 Traffic Sign Placement and Location

International Road Federation (1994)
22 Minutes (Copyrighted)

A video on the basics of sign placement for urban, rural, and freeway conditions. Measurements are given in the metric system. Scenes appear to be in the Washington, DC, and Virginia areas.

Audiences: General public including entry-level technicians.

Overall Ratings: T2 Director — Fair

312 Traffic Control Signals at Intersections

International Road Federation (1994) (Copyrighted)
18 Minutes

Describes in very basic terms the warrants, phasing determination, and timing of signals. Reference is made to details in the MUTCD. Flashing lights are also considered. Scenes are in Virginia and Washington, DC, areas.

Audiences: General public and entry-level signal technicians.

Overall Ratings: T2 Director — Good

313 Motor Grader Preventive Maintenance

New Mexico Highway and Transportation Training Academy
12 Minutes

The video details the necessary steps to keep a motor grader in good operating condition. The steps include pre-start, warm up, operation, and shutdown. Also included is information on how to fill out a vehicle checklist and deficiency report.

Audiences: Motor grader operators.

Overall Ratings: T2 Trainer — Very Good

314 Asphalt Overlays: The Four P's

Minnesota Local Road Research Board
16 Minutes

The video explains in detail the correct sequences to follow when considering an asphalt overlay. These are the four P's: Planning, Preparation, Production, and Placement. Excellent use of graphs and charts as well as the video sequences are used to explain the process. (A handout sheet is available.)

Audiences: People who have little experience in laying asphalt but want information on the process.

Overall Ratings: T2 Trainer — Excellent

315 You May Not Get A Second Chance

Goodyear
30 Minutes (Copyrighted)

This presentation uses some graphic video clips of exploding tires to illustrate the dangers of working on truck tires. Also explained is the employee training requirements according to the OSHA regulations. The video shows the proper method of mounting and demounting of split rim tires, as well as the safety equipment required to perform the task.

Audiences: People involved in tire changing.

Overall Ratings: T2 Trainer — Good

316 Work Zone Safety TV Clips

Fisher Communications and WSDOT
19 Minutes

This video starts with a promotional clip for the "Give 'em a Brake Program." This is followed by an on-the-spot example of the problem, as a TV crew catches a drunk driver out of control in a work zone. Several other TV station segments and interviews explain the very real danger of working around traffic.

Audiences: All persons at traffic work zones.

Overall Ratings: T2 Trainer — Excellent

317 Pavement Surface Condition Rating Video

WSDOT, NWT2 Center, et. al. — 1995
26 Minutes

This training video was developed as a companion to the T2 Center's *Pavement Surface Condition Rating Manual* which is used by many local agencies in Washington. It is formatted specifically for teaching with breaks and intermissions for question and answer sessions placed at strategic points in the curriculum. The pavement distresses shown in the video correspond to those discussed in the rating manual. Both flexible and rigid pavement types are discussed.

This thorough video will help workers become familiar with common pavement defects. Upon completion of this video and with use of the rating manual, employees should be able to recognize the type, severity, and extent of damage to road surfaces.

Audiences: Pavement raters.

Overall Ratings: T2 Director — Excellent

318 Effective Snow Fences

SHRP and Roy Jorgenson Associates, Inc.
20 Minutes (Copyrighted)

It costs $3.00 per ton to remove snow. It costs $.03 per ton to store snow with snow fences. The cost benefits as well as the safety issues involved are explained in this video. Also discussed are the key elements of installing snow fences. The use of these fences can eliminate the need for constant removal as well as improve safety by eliminating blowing and drifting snow.

Audiences: Maintenance personnel.

Overall Ratings: T2 Trainer — Excellent

319 Road Oyl (Resin Modified Emulsions)

Soil Stabilization Products Company, Inc.
25 Minutes (Copyrighted)

This video is about a product being used all over the world for road building, dust control, and erosion control. This resin concrete is an environmentally friendly, non-water soluble, high binding strength emulsion. The products test show it has the strength of Portland concrete and the flexibility of asphalt. The material is used without heating and can be applied with equipment most maintenance crews have available. The video shows dozens of projects where the material is being used.

Audiences: Anyone involved in road maintenance, dust control, or surface treatments, especially those with unsurfaced roads.

Overall Ratings: T2 Trainer — Excellent (very interesting)

320 Quick Change Moveable Barrier

Barrier Systems, Inc.
8 Minutes (Copyrighted)

A very innovative method of moving Jersey type barriers in traffic is illustrated in this video.

The special machine is used to provide another lane during rush hour traffic. This unit is being used on I-30 in the Dallas, Texas, area. The machine can move 8½ miles of barrier in approximately 66 minutes. The use of this method of HOV control has increased the use of bus ridership by 8 percent, and carpooling by 200 percent. This HOV lane carries more than two freeway mainlanes. This is a very good video to watch just for the technology involved.

Audiences: Those interested in HOV lane usage.

Overall Ratings: T2 Trainer — Excellent

321 Lightning and Transient Protection for Traffic Controllers: The Nuts and Bolts of Jolts

NCHRP, TRB
22 Minutes

This video explains recommended procedures for transient and electromagnetic interference to traffic control equipment.

The video uses laymen terms (no special background in electrical engineering or electronics is required). Included is a basic summary of the equipment, problems, and protection requirements.

This thorough and well done video uses clips and charts to illustrate the problems and their solutions.

Audiences: Installers and repairmen of traffic control equipment.

Overall Ratings: T2 Trainer — Excellent

322 Ultra-Thin Whitetopping

ACPA/NRMCA
8 Minutes

This brief tape was produced by the American Concrete Pavement Association and the National Ready Mixed Concrete Association to promote the use of thin strengthened concrete overlays of asphalt pavements. Examples are shown of actual projects that used this new process. Many advantages are presented as well as the process used.

Audiences: Engineers, administrators, road foremen, and workers.

Overall Ratings: T2 Director — Excellent

323 Dura Patcher

Duraco Industries, Inc.
15 Minutes

This tape shows the operation of a patching device developed by Duraco.

Audiences: Maintenance workers and superintendents.

Overall Ratings: T2 Director — Good, however rather repetitive

324 Washington's Disasters — Are You Ready?

WSDOT, Department of Community, Trade and Economic Development, et. al.
1 Hour 20 Minutes (Copyrighted)

This three-part video was made to help individuals and their families understand and prepare for various potential disasters in Washington State. Heavy emphasis is placed on being ready for earthquakes, floods, volcanic eruptions, and other occurrences. Part 1 provides the viewer with 18 questions on "Am I Really Prepared?"

Part 2, "What is There to Worry About and How Bad Could it Be" dramatizes vividly the answers. And Part 3, in 18 minutes, explains what each person and each family member can do to be ready when natural disasters occur. All parts of the tape are important, but a shortened version can be made with showing Parts 1 and 3 for those who are already aware of the need to worry about natural disasters.

A booklet titled "Family Emergency Preparedness Plan" may be requested when ordering this tape.

Note: Local agencies staff should coordinate all of their emergency management efforts with their Local Emergency Management Organizations. This includes requesting to show or borrow this video.

Audiences: All individuals.

Overall Ratings: T2 Director — Excellent

325 Ergonomics

Long Island Productions, Inc.
7 Minutes (Copyrighted)

A short practical tape emphasizing the four basic elements of an ergonomics program: (1) Work site analysis, (2) ergonomic checklist — finding both problems and solutions, (3) hazard prevention and control, and (4) training and education. Good examples are shown for each basic element. Emphasizes that many work site improvements are not expensive.

Audiences: All employees.

Overall Ratings: T2 Trainer — Good

326 Equipment Tiedown — Tilt Bed Trailers

WSDOT
18 Minutes

The video demonstrates the proper trailer inspection, equipment loading, and equipment tiedown procedures for heavy equipment in accordance with federal regulations. The example shown is an 11-ton Case articulated front end loader being placed upon a tilt type flatbed trailer.

The tape also shows the recommended safety checks, at periodic stops, as the hauling is underway. The overall thrust of the subject is to promote safer hauling of equipment on public streets and highways. The detail appears to be adequate.

Audiences: Persons doing routine hauling of heavy equipment.

Overall Ratings: T2 Trainer — Good

327 Stress Management — Supervisors and Employees

Training Network, Inc.
21 Minutes (Copyrighted)

This tapes provides a basic definition of stress, how to recognize stress, and what can be done to treat it. Examples are provided on how a supervisor can recognize stress in his employees and how the supervisor should approach solutions in a positive manner. A lecture type presentation, but still made interesting by portraying a variety of stress situations.

Audiences: All employees.

Overall Ratings: T2 Trainer — Good

328 Fire Extinguisher Training and Use

Long Island Productions, Inc.
14 Minutes (Copyrighted)

This brief video on fire extinguishers covers the fundamentals including:

- Checking existing extinguishers.
- Types of extinguishers A, B, C, D.
- History of their development.
- Classes of fires A, B, C, D (matches up with types of extinguishers).
- Basic operational techniques (PASS).
- Clues on prevention of fires.

The importance of receiving fire extinguisher training (usually free) from your local fire department is stressed.

Audiences: All employees.

Overall Ratings: T2 Director — Excellent , T2 Trainer — Excellent

329 Subsurface Utility Engineering — A Proven Solution

FHWA (1995)
16 Minutes

This video promotes the specialized discipline of utility engineering to reduce the problems associated with underground utilities, storage tanks, and other buried facilities. Four levels of data accumulation and reviews are explained so that a professional can subjectively define up-front the level of detail of investigation. Film emphasizes the need for agencies to take the lead in utility engineering — a subjective science requiring prudent engineering decisions to provide safety, cost savings, environmental protection, and other public benefits.

Audiences: Public works managers, engineers, and other public officials.

Overall Ratings: T2 Director — Excellent

330 Sign Maintenance and Installation

FHWA LTAP
27 Minutes

T2 (LTAP) video emphasizes importance of sign inventories, maintenance, and proper care to avoid lawsuits because of improper actions. Notes ways that an agency can know and respond to unsafe conditions. Discussed are inventories, sign reflectivity surveys, complaint forms, complaint processes, work orders, proper equipment and materials on the repair trucks, innovative tools, safety protection devices for the crew, use of ball bank indicators, work zone needs, sign assembly devices.

Reference is made to Kansas Handbook of Traffic Control Practice for Low Volume Roads which was created using parts of the MUTCD, the national guide. Some standards are given from Riley County, Kansas, which show the lateral sign clearances that this particular agency has defined.

Audiences: Maintenance crews.

Overall Ratings: T2 Director: Very good

331 Chip Seal Applications

FHWA LTAP (1995)
40 Minutes

This T2 (LTAP) video covers all aspects of chip seals. It includes three equal parts: (1) preliminary concerns specifications, surface prep, etc.; (2) the actual procedures and checks required; and (3) examples of some problems and pitfalls that may occur if proper care is not taken.

Audiences: Maintenance workers and their supervisors.

Overall Ratings: T2 Director — Excellent. The tape is one of the best; thorough and comprehensive covering all the basics of chip seals.

332 Problems With Gravel Roads

FHWA LTAP (1995)
55 Minutes

This tape by the LTAP (T2) program comes in three parts and provides thorough, comprehensive, and all the fundamental aspects of gravel roads, the predominate type of road in the USA. Part 1 discusses the general types and environmental conditions impacting gravel roads. Part 2 covers problems associated with gravel roads, their causes, prevention, and correction. Prime problems are corrugations (wash boarding), loss of materials, and rutting. Poor design, poor grader operations, and poor materials all have their impact on the life of gravel roads. Part 3 covers maintenance and equipment techniques.

Audiences: Maintenance workers, grader operators, and maintenance supervisors.

Overall Ratings: T2 Director — Excellent

5:P:AVC2

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